



**CITY OF TEMPE, ARIZONA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION**

**INVITATION FOR BIDS**

**FOR**

**FIBER OPTIC CABLE INSTALLATION  
AND ITS IMPROVEMENTS – RURAL ROAD  
FROM ALEXANDER BOULEVARD TO  
MCKELLIPS ROAD**

**PROJECT NO. 6907261  
FEDERAL AID PROJECT NO. TMP-0(240)D  
ADOT TRACS NO. 0000 MA TMP SZ166 01C**

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2017

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**CITY OF TEMPE, ARIZONA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION**

**NOTICE TO CONTRACTORS**

**FIBER OPTIC CABLE INSTALLATION AND  
ITS IMPROVEMENTS – RURAL ROAD FROM  
ALEXANDER BOULEVARD TO MCKELLIPS ROAD  
PROJECT NO. 6907261  
FEDERAL AID PROJECT NO. TMP-0(240)D  
ADOT TRACS NO. 0000 MA TMP SZ166 01C**

**1. INTRODUCTION**

THIS INVITATION FOR BIDS is hereby offered by the City of Tempe, an Arizona municipal corporation (“City”), for Fiber Optic Cable Installation and ITS Improvements – Rural Road from Alexander Boulevard to McKellips Road, as set forth herein, and shall be identified as Project No. 6907261.

This Project is funded by the U.S. Department of Transportation, Federal Highway Administration (FHWA), through the Arizona Department of Transportation (ADOT).

The Federal Provisions section of this Invitation for Bids and Contract applies to all bidders and all contractors for the Project.

**1.1. OVERVIEW OF PROJECT**

The scope of work includes installing Fiber Optic cable along Rural Road from Alexander Boulevard to McKellips Road.

**1.2. EXAMINATION OF PREMISES, SPECIFICATIONS, AND CONTRACT**

Bidder shall visit the site of the Project and shall fully acquaint itself with all conditions as they exist, so that it may fully understand the site, difficulties, and restrictions attending the execution of the work.

Bidder shall also thoroughly examine and be familiar with the specifications, plans, and the Contract documents. Failure of Bidder to obtain, receive, or examine any addenda to the proposed Contract, or to visit the site and acquaint itself with the conditions there existing, shall not relieve it from any obligation with respect to the submitted bid.

By submitting a bid, Bidder agrees that it has examined the site, specifications, plans, and Contract, and accepts all site conditions, the proposed Contract, and all exhibits and addenda thereto.

**1.3. START OF WORK / TERM OF CONTRACT**

Work shall start as soon as practicable, but not later than seven (7) calendar days after the Notice to Proceed date and shall be completed within four hundred twenty (420) calendar days following the Notice to Proceed date.

**2. SCOPE OF WORK**

The proposed work will consist of **INSTALLING CONDUIT AND FIBER OPTIC CABLE TO PROVIDE COMMUNICATION TO TRAFFIC SIGNALS**, together with associated work.

**2.1. CONTRACTOR'S CONSTRUCTION SCHEDULE**

Prior to the start of work, a construction progress schedule shall be required and shall comply with the requirements of MAG Specifications 108.4. In addition, a schedule update comparing actual progress with scheduled progress will be required with the submission of each monthly pay request.

**2.2. UNIFORM STANDARD SPECIFICATIONS**

All work done under this Contract shall be accomplished in accordance with the Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction – 2015 Edition (“MAG Specifications”) and the City of Tempe Supplement to the MAG Uniform Standard Details and Specifications for Public Works Construction – 2014 (“City of Tempe Supplement”), except as modified in the Contract.

In the case of a discrepancy or conflict, the order in which documents and Contract sections govern is as follows, from highest to lowest: federal provisions, special terms and conditions, technical specifications, plans, general terms and conditions, City of Tempe Supplement, and MAG Specifications.

All bids shall be made in accordance with the General Conditions of the MAG Specifications.

**2.3. CONTRACTOR'S REPRESENTATIVE**

Contractor shall at all times be present at the worksite or represented by a superintendent or other properly designated agent. Instructions and information given by City construction project manager to Contractor's superintendent or agent on the work shall be considered as having been given to Contractor.

**2.4. SUPERVISION BY CONTRACTOR**

Contractor will supervise and direct the work. It will be solely responsible for the means, methods, techniques, sequences, and procedures of construction.



Contractor will employ and maintain on the work a qualified superintendent who shall be designated in writing by Contractor and approved by City as Contractor's representative at the site. The superintendent shall have full authority to act on behalf of Contractor and all communications given to the superintendent shall be as binding as if given to Contractor. The superintendent shall be present on the site at all times in order to perform adequate supervision and coordination of the work. No substitution of the superintendent will be permitted without prior written request by Contractor and written consent of City.

**2.5. AUTHORITY OF CITY ENGINEER'S APPOINTED REPRESENTATIVE**

City construction project manager shall act as City Engineer's designated representative during the construction period. He or she shall advise on questions concerning coordination with City, public safety, and quality and acceptability of materials and work performed. City Engineer, City construction project manager, or their assigned inspector shall interpret the intent of the Contract plans, specifications, and technical provisions in an unbiased manner.

City Engineer, City construction project manager, or their assigned inspector shall be present on the site at times during construction to monitor the work and to maintain records for Contract management. City construction project manager shall promptly make decisions relative to the interpretation of the Contract so as to minimize delays in construction. City construction project manager will not be responsible for directing construction, control, techniques, sequence, or procedures, or for directing job safety.

**2.6. BENEFICIAL OCCUPANCY**

Beneficial occupancy is use of a facility or project, in whole or in part, by City for its intended purpose. This may occur even though some work of the Contract remains undone. Prior to such use or occupancy, City will provide notice to Contractor and accomplish a partial acceptance inspection. Beneficial occupancy will apply to general right-of-way projects only.

**2.7. SUBSTANTIAL COMPLETION**

Substantial completion is work that is ready for occupancy and use for its intended purpose as certified by City and a certificate of occupancy. This term will be applied to building construction projects only.

**2.8. PROJECT COMPLETION**

Project completion is full completion of all construction associated with the Contract, including, but not limited to, punch list items, close-out documentation, operations and maintenance manuals, warranties, and record plans as certified by the architect/engineer of record. Contractor may be found in default of this Contract in accordance with MAG Specifications 108.10 should project

completion fall behind substantial completion by more than forty-five (45) days.

**2.9. CONTRACT COMPLETION DATE**

The Contract completion date established by reference to the Notice to Proceed date is for completion of all or specified portions of the work. This includes items of work to be completed under an owner allowance or as part of a contingency item. The stated Contract completion date will take into account anticipated or actual weather conditions that are not unusually severe for the area and time of year. This date may be expressed as a calendar date or as a number of calendar days after the Notice to Proceed date.

If time extensions are issued by City, the revised Contract completion date will be referred to as the adjusted Contract completion date.

**2.10. FINAL INSPECTION**

Contractor is responsible for complying with the specifications and is hereby forewarned that final approval of any work will not be given until the entire project is completed and accepted by City. Prior to final inspection on any City facilities requiring a building permit, Contractor must call for final inspection from the Community Development Department and Public Works Department of City. The final inspection must be completed prior to final acceptance and payment.

**2.11. FINAL ACCEPTANCE & GUARANTEE**

Final acceptance shall mean a written final acceptance of the work. City Engineer shall make the final acceptance promptly after the work has been inspected and found to be completed in accordance with the Contract. The work performed under this Contract shall be guaranteed for a period of one (1) year from the date of final acceptance.

**2.12. AS-BUILT DRAWINGS**

Contractor shall provide and maintain accurate field data on a redlined set of Contract drawings, which are to be kept current and submitted as complete at the conclusion of the construction. These record drawings will be used as documentation for progress payments, and upon project completion, for the preparation of record drawings by the architect/engineer. Final payment will not be issued until all record drawings are submitted by Contractor, and are certified to be complete by the architect/engineer of record.

**2.13. SHOP DRAWINGS, SCHEDULES, SAMPLES & PROJECT DOCUMENTATION**

In time for each to serve its proper purpose and function, Contractor shall submit

to City construction project manager such schedules, reports (including daily construction reports and progress meeting notes), drawings, lists, literature samples, instructions, directions, and guarantees as are specified or reasonably required for construction, operation, and maintenance of the facilities to be built and/or furnished under this Contract.

Shop drawings and data shall be submitted to City construction project manager as one (1) hard copy and one (1) legible electronic PDF document of each submittal.

The submittal shall clearly indicate the specific area of the Contract for which the submittal is made. The additional copies received will be returned to Contractor's representative at the job site. City construction project manager's notations of the action taken will be noted on one (1) of these returned copies.

The above drawings, lists, prints, samples, and other data shall become a part of the Contract and a copy of the same shall be kept with the job site Contract, and the fabrications furnished shall be in conformance with the same.

City construction project manager's review of the above drawings, lists, prints, specifications, samples, or other data shall in no way release Contractor from its responsibility for the proper fulfillment of the requirements of this Contract, nor for fulfilling the purpose of the installation, nor from its liability to replace the same should it prove defective or fail to meet the specified requirements.

#### **2.14. QUALITY CONTROL**

All material shall be new and of the specified quality and equal to the accepted samples, if samples have been submitted. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from the Contract, and it shall be the duty of Contractor to call City construction project manager's attention to apparent errors or omissions and request instruction before proceeding with the work.

City Engineer may, through appropriate instruction, correct errors and supply omissions. Instructions provided by City Engineer shall be as binding upon Contractor as though contained in the original Contract.

At the option of City construction project manager, material to be supplied under this Contract will be tested and/or inspected either at its place of origin or at the site of the work. Contractor shall give City construction project manager written notification well in advance of actual readiness of material to be tested and/or inspected at point of origin. Satisfactory tests and inspections at the point of origin shall not be construed as a final acceptance of the material, nor shall it preclude retesting or reinspection at the site of the work.

Contractor is responsible for quality control measures necessary to provide acceptable quality in the production, handling, and placement of all materials. All materials will be inspected, tested, and approved by City construction project manager prior to incorporation in the work. Under Federal materials and quality control guidelines Contractor shall perform various materials testing as part of its quality control measures. These measures are as required on the Local Public Agency Materials Sample Checklist under recommended number of samples (ACCP). Contractor is further responsible for coordinating the testing efforts of up to three separate testing entities to perform the quality control testing (Contractor provided), quality assurance testing (City provided); and independent assurance testing (City provided). When the specifications require specific quality control measures for certain materials, sampling, and testing of materials shall be in accordance with the requirements of the ADOT Materials Testing Manual and applicable Federal specifications. Any work in which materials not previously approved are used shall be performed at Contractor's risk and may be considered as unauthorized and unacceptable and not subject to the payment provisions of the contract.

Contractor shall submit to City construction project manager an original or copy of either a Certificate of Compliance or a Certificate of Analysis, as required, prior to the use of any materials or manufactured assemblies for which these specifications or the Special Provisions require that such a certificate be furnished. Materials or manufactured assemblies for which a certificate is furnished may be sampled and tested at any time, and, if found not in conformity with the requirements of the plans and the specifications, will be subject to rejection, whether in place or not. Certificate of Compliance or a Certificate of Analysis, shall contain the information described in ADOT Standard Specifications Subsection 106.05(b) and 106.05(c).

Measurement and payment for the quality control testing shall be incidental to the project unless otherwise addressed within the contract, bid tab, or specifications as a payment and bid item.

#### **2.15. EXCESS MATERIALS**

Excess or unsuitable material, broken asphaltic concrete, and broken Portland cement concrete shall be disposed of by Contractor. Contractor shall, prior to commencement of the work, submit a letter to City Engineer stating the location of disposal site(s) for all excess or unsuitable material and certifying that it has obtained the property owner's permission for the disposal of all surplus material.

#### **2.16. MISCELLANEOUS REMOVAL AND RELOCATIONS**

Miscellaneous removals and relocations shall be performed by Contractor, and is construed to mean the removal of all unsuitable materials, whether designated or implied by the plans and specifications, and shall include but not be limited to removal of items of every nature and description such as pipes, concrete, asphalt,

block, brick, rock, and metal, including temporary removal and reinstallation, unless such items are specifically designated in a separate bid item. In addition, certain items requiring temporary removal and reinstallation such as mail box stands, sign posts, survey monument frames and covers, shall be included in this category.

**2.17. PROTECTION OF FINISHED OR PARTIALLY FINISHED WORK**

Contractor shall properly guard and protect all finished or partially finished work, and shall be responsible for the same until that phase is completed and accepted by City.

Estimate or partial payment of completed work shall not release Contractor from such responsibility prior to City's acceptance, but Contractor shall turn over the entire work in full accordance with these specifications before final payment can be made.

**2.18. SURVEY CONTROL POINTS**

Existing survey monuments shall be protected by Contractor or removed and replaced under the direct supervision of City of Tempe Engineering Division Land Services Section.

One week prior to construction, Contractor shall notify City of Tempe Engineering Division Land Services Section of any survey monuments that need to be relocated. Any monuments damaged or lost due to Contractor's negligence and/or lack of notification to City of Tempe Engineering Division Land Services Section shall be replaced at Contractor's expense. In the event a lot corner will be disturbed, Contractor shall notify affected property owner(s) and obtain consent prior to any construction. Any lot corners disturbed or lost due to Contractor's negligence shall be replaced at Contractor's sole expense.

**2.19. HINDRANCES AND DELAYS**

Except as provided herein, no charge shall be made by Contractor for hindrances or delays from any cause during the progress of any portion of the work set forth in this Contract; however, delays due to no fault or neglect of Contractor may entitle Contractor to a time extension sufficient to compensate for the delays. The amount of the time extension, if any, shall be determined by City Engineer provided Contractor gives City Engineer immediate notice in writing of the cause of such delay.

The parties agree to negotiate in good faith for the recovery of damages related to expenses incurred by Contractor for a delay for which City is solely responsible that is unreasonable under the circumstances, and that was not within the contemplation of the parties to the Contract at the time the Contract was entered into.

**2.19.1.** Unless specifically provided for herein, the maximum compensation for an unreasonable or unforeseen delay shall not exceed the daily amount specified for liquidated damages in MAG Specification 108.9, as based on the original Contract amount.

**2.19.2.** This section shall not be construed to void any provisions of this Contract, which require notice of delays, or which provide for alternative dispute resolution, other procedures for settlement, or which provide for liquidated damages.

However, if the parties cannot reach agreement for the recovery of damages as set forth herein, the determination of City shall be final.

**2.20. SUBSIDIARY WORK**

All work called for in the plans and specifications shall be performed by Contractor, and unless a specific bid item is provided for the work, then such portion of the work will be considered subsidiary to other work for which payment is provided.

**2.21. MISCELLANEOUS WORK AND ALLOWANCES**

Unless otherwise specified in the Contract, the following items will be included in the work with no direct payment allowed. Payment shall be included in the payment for other items for which direct payment is made.

**2.21.1.** Contractor's expenses for, but not limited to, mobilization, job site office, storage facilities, traffic control and public safety devices, sanitary facilities, utilities, and telephone.

**2.21.2.** Cleanup, including day-to-day cleanup.

**2.21.3.** Notification to residents adjacent to this project prior to the start of work on construction that may affect them.

**2.21.4.** Water required for compaction or dust control.

**2.21.5.** Miscellaneous removals and relocations not otherwise specified in the Technical Specifications.

**2.21.6.** Power pole bracing.

**2.21.7.** Removal of trees twelve inches (12") or less in diameter.

**2.21.8.** Removal, relocation, and/or modification of existing walls and fences.

**2.21.9.** Trimming of trees and bushes.

**2.21.10.** Replacement of plant material and repair of irrigation equipment to meet or exceed conditions existing prior to Contractor beginning work.

**2.22. CHANGE ORDERS**

In the event that significant changes in the scope of the work and/or changes in the quantities due to contingencies of construction become necessary, such changes shall be made in accordance with Section 104.2 of the General Conditions in the MAG Specifications.

The costs associated with any extra work as authorized by City must be approved prior to the start of work. The final costs for additional work shall also include all charges associated with extended general conditions or Contract acceleration. Pay requests for extra work performed shall be submitted with the next billing cycle and shall not exceed thirty (30) days from the date extra work was performed.

**2.23. ADDITIONAL SERVICES**

Additional services that are outside the scope of basic services contained in this Contract shall not be performed by Contractor without prior written authorization from City. Additional services, when authorized by an executed Contract or an amendment to this Contract, shall be compensated for by a fee mutually agreed upon between City and Contractor.

**3. SPECIAL TERMS AND CONDITIONS**

**3.1. PAYMENT BOND; PERFORMANCE BOND**

A payment bond and a performance bond, each in an amount equal to the full contract amount, will be required of Contractor immediately after notice of Contract award, and before final Contract execution. Each bond shall be in accordance with Arizona Revised Statutes (A.R.S.) § 34-201, *et seq.*, as amended from time to time.

Arizona law provides that the bonds shall be executed solely by a bonding company, liability insurance carrier, or excess insurance carrier that holds a certificate of authority to transact surety business in Arizona, issued by the director of the department of insurance pursuant to A.R.S. title 20, chapter 2, article 1, as amended from time to time. Additionally, the City requires that the bonding company, liability insurance carrier, or excess insurance carrier have a Financial Strength Rating of A- or better and a Financial Size Category of VII or higher, as listed in the most recent "Best's Key Rating Guide – Property/Casualty," published by A.M. Best Company. An individual surety or sureties shall not execute either bond, even if the requirements of A.R.S. § 7-101 are satisfied.

### **3.2. INSURANCE**

Certificates of Insurance verifying insurance coverage that meets the following minimum requirements will be required of Contractor immediately after notice of Contract award, and before final Contract execution.

Arizona law provides that the insurer must hold a certificate of authority to transact insurance in Arizona, issued by the director of the department of insurance pursuant to Arizona Revised Statutes, title 20, chapter 2, article 1, as amended from time to time. Additionally, the City requires that the insurance company have a Financial Strength Rating of A- or better and a Financial Size Category of VII or higher, as listed in the most recent "Best's Key Rating Guide – Property/Casualty," published by A.M. Best Company. This requirement does not apply to the Workers' Compensation / Employer's Liability portion of the Certificate of Insurance.

#### **3.2.1. Contractor shall maintain limits no less than:**

- a. **Commercial General Liability:** \$2,000,000 combined single limit per occurrence for bodily injury and property damage, including coverage for contractual liability (including defense expense coverage for additional insureds), premises/operations, underground explosion and collapse hazard, personal injury, broad form property damage, products and completed operations, independent contractors and product liability. The general aggregate limit shall apply separately to this project/location or the general aggregate shall be twice the required occurrence limit.
- b. **Automobile Liability:** \$1,000,000 combined single limit per accident for bodily injury and property damage, including coverage for owned, hired, and non-owned vehicles as applicable.
- c. **Excess Liability (umbrella form):** As required.
- d. **Workers' Compensation and Employer's Liability:** Workers' Compensation and Employer's Liability statutory limits as required by the State of Arizona.

City shall have no responsibility or liability for such insurance coverage.

#### **3.2.2. Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared and approved by City. At the option of City, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects City, its officials, employees, and volunteers, or Contractor shall procure a bond



guaranteeing payment of losses and related investigations, claims administration, and defense expenses.

### **3.2.3. Other Insurance Provisions**

The policies or self-insurance certifications are to contain, or be endorsed to contain, the following provisions:

#### **a. Commercial General Liability and Automobile Liability Coverage:**

City, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds with respect to: liability arising out of activities performed by or on behalf of Contractor including the insured's general supervision of Contractor; products and completed operations of Contractor; premises owned, occupied, or used by Contractor; or automobiles owned, leased, hired, or borrowed by Contractor. The coverage shall contain no special limitations on the scope of protection afforded to City, its officers, officials, employees, agents, or volunteers, for work related to Contractors', employees', agents', subcontractors', or sub-subcontractors' activities.

Contractor's insurance coverage shall be primary with respect to City, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by City, its officials, employees, or volunteers shall be in excess of Contractor's insurance and shall not contribute to it.

Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, its officers, officials, employees, agents, or volunteers.

Coverage shall state that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

#### **b. Workers' Compensation and Employer's Liability Coverage**

The insurer shall agree to waive all rights of subrogation against City, its officers, officials, employees, agents, and volunteers for losses arising from work performed by Contractor for City.

#### **c. All Coverages**

Each insurance policy required by this Contract shall be endorsed to state that the coverage shall not be suspended, voided, and/or canceled by either party, reduced in coverage or in limits, except after thirty (30) days' prior

written notice by certified mail, return receipt requested, has been given to City.

#### **3.2.4. Other Insurance Requirements**

Contractor shall:

- a. Immediately after notice of Contract award, and before final Contract execution, furnish City with certificates of insurance, in form and with insurers acceptable to City, which shall clearly evidence all insurance required in this Contract and provide that such insurance shall not be canceled, allowed to expire, or be materially reduced in coverage except on thirty (30) days' prior written notice by certified mail to City, and in accord with stated insurance requirements of this bid solicitation. MAG Specification 103.6 is fully incorporated into this Contract, except to the extent it conflicts with the limits set forth in this Contract. The insurance policies required by MAG Specification 103.6 shall additionally provide full coverage of indemnity to City, including an increase in the minimum limits to \$2,000,000 combined single limit coverage for General Liability. Prior to execution of the Contract, Contractor shall furnish City with a Certificate of Insurance as evidence that policies providing the required coverages, conditions, and limits are in full force and effect. Such certificates shall identify the project and shall provide for not less than thirty (30) days' advance written notice to City, by certified mail, of cancellation or termination. Any cancellation clause shall not include the phrases "endeavor to" or "but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents or representatives." City shall not be obligated, however, to review same or to advise Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Contractor from, or be deemed waiver of City's right to insist on, strict fulfillment of Contractor's obligations under this Contract.
- b. Provide certified copies of endorsements and policies if requested by City in addition to certificates of insurance.
- c. Replace certificates, policies, and endorsements for any such insurance expiring prior to completion of services.
- d. Maintain such insurance from the time services commence until services are completed. Should any required insurance lapse during the Contract term, requests for payments originating after such lapse shall not be processed until City receives satisfactory evidence of reinstated coverage as required by this Contract, effective as of the lapse date. If insurance is not reinstated, City may at its sole option, terminate this Contract effective on the date of such lapse of insurance.

### **3.2.5. Subcontractors and Sub-Subcontractors**

Contractor shall include all subcontractors and sub-subcontractors as insureds under its policies. All coverage for subcontractors and sub-subcontractors shall be subject to all of the requirements stated herein for Contractor.

### **3.3. INDEMNIFICATION**

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless City, its officers, and its employees, from liabilities, damages, losses, and costs, including reasonable attorney fees and court costs, to the extent caused by the negligence, recklessness or intentional wrongful conduct of Contractor, its subcontractors, design professionals, or other persons employed or used by Contractor in the performance of the contract or subcontract. Nothing in this section shall prohibit the requirement of insurance coverage that complies with this section, including the designation of any person as an additional insured on a general liability insurance policy or as a designated insured on an automobile liability policy. The amount and type of insurance coverage requirement set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

### **3.4. PAYMENT**

City shall make payment to Contractor pursuant to A.R.S. § 34-221 and MAG Specifications 109.

#### **3.4.1. Measurement of Payment**

Quantities of materials for this work shall be paid under the appropriate schedule at the applicable Contract price per unit of measurement with no allowances for waste.

Payment for various items in the bid shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner as specified. No additional payment will be made for work related to any item unless specifically called for in the bid.

Materials placed without approval of the inspector, or materials rejected due to improper placing, improper proportions of materials, or materials found to be defective, will not be paid for.

#### **3.4.2. Payment Requests**

Payment requests shall be submitted by Contractor on the standard City construction pay request form at <http://www.tempe.gov/city-hall/public->

works/engineering/eng-contract-payment. Requests shall be made in hard-copy only to the Engineering Division office and shall include all supporting documentation for work performed during the payment period. Pay requests submitted with insufficient documentation to verify work effort and quantities will be returned to Contractor for revision. Revised payment requests shall be re-submitted to City in hard-copy only to the Engineering Division office.

Contractor shall submit its first request for payment no later than 40 calendar days from the Notice to Proceed date. All subsequent requests for payment shall be made on a monthly basis and no later than every 30 calendar days.

### **3.5. PRE-CONSTRUCTION MEETING**

Contractor shall meet with the City Engineer for a preconstruction conference prior to commencing work. At the preconstruction conference, Contractor shall submit a progress schedule showing the order in which Contractor proposes to carry out the work; the dates on which Contractor and its subcontractors will start the salient features of the work, including procurement of materials, equipment, etc.; the ordering of articles of special manufacture; the furnishing of drawings, plans, and other data for the review and approval of the City Engineer; the inspection of structural steel fabrication; and the contemplated dates for the completion of the said salient features. The schedule may be in a bar chart format or a critical path method format. No schedule activity shall be shorter than one day or longer than 15 working days. The schedule must show interrelationships among the activities, and the controlling items of work throughout the project shall be identified. If requested by the City Engineer, Contractor shall furnish information needed to justify activity time durations. Such information shall include estimated manpower, equipment, unit quantities, and production rates. The schedule shall illustrate the completion of the work not later than the contract completion date.

Contractor shall furnish authorized signature forms and a list of Contractor's proposed subcontractors and major material suppliers.

Progress schedules shall have considered the time requirement for ordering articles of special manufacture to meet specific requirements of the work when structural steel fabrication inspection is required.

Contractor shall submit a traffic control plan in accordance with the subsection of Special Terms and Conditions titled Traffic Control.

Contractor shall also submit a safety plan and designate an employee as Safety Supervisor, in accordance with ADOT Standard Specifications Subsection 107.08. If approved by the City Engineer, Contractor may designate one employee to be responsible for both the traffic control and safety plans.

If the project requires that Contractor or City personnel to work from falsework, within shoring, or in any other hazardous area, Contractor shall submit as part of Contractor's safety plan specific measures it will use to ensure worker safety.

Contractor shall also submit a program for erosion control and pollution prevention, as set forth in ADOT Standard Specifications Subsection 104.09, on all projects involving clearing and grubbing, earthwork, structural work, or other construction, when such work is likely to create erosion or pollution problems.

Contractor shall designate a qualified employee as Quality Control Manager to be responsible for implementing, monitoring and, as necessary, adjusting the processes to assure acceptable quality. The Quality Control Manager shall be responsible for the implementing and monitoring of the quality control requirements described in ADOT Standard Specifications Subsection 106.04(C) and 106.05. The quality control manager shall be a full time employee of Contractor, and shall be on the project site during all construction activities.

If the project has an On-the-Job Training (OJT) requirement (see the subsection of Federal Provisions titled On-the-Job Training), Contractor shall submit its written OJT schedule and training plan.

If Contractor fails to provide the required submissions, the City Engineer may order the preconstruction conference suspended until such time as they are furnished. Work shall not begin until the preconstruction conference has been concluded and the safety plan has been approved, unless authorized by the City Engineer. Contractor shall not be entitled to additional compensation or an extension of contract time resulting from any delays due to such a suspension.

### **3.6. LICENSES**

The low bidder and all subcontractors must carry the appropriate State of Arizona contractor's license(s) for the proposed work prior to award of the Contract. Should the lowest responsive bidder not be able to obtain the required license(s), the project may be awarded to the next lowest responsive bidder who has the required license(s).

### **3.7. HAUL PERMIT**

In any operation where more than one-tenth of an acre of surface area is disturbed and/or when unpaved onsite haul roads are used, Contractor will obtain a Maricopa County Air Quality Department permit as required under Rule 200 of the Maricopa County Air Pollution Control Rules and Regulations. This permit will require that a control plan to mitigate dust and tracking problems be submitted to the County for approval prior to issuance of the Earth Moving Permit. The control plan should be submitted to City for review prior to County submittal to ensure that all elements of the planned operation are covered. Please

contact the Maricopa County Air Quality Department at 602-506-6010 for additional details.

In addition, all Contractors hauling fill or excavation materials where the haul exceeds five thousand (5,000) cubic yards, or when the duration of the haul is more than ten (10) working days, are required to obtain a City haul permit before the hauling operation begins.

Prior to receiving a hauling permit, Contractor must submit the required certificate of insurance, a plan showing the proposed haul routes, and a complete schedule of the hauling operation to the City Transportation Division. Prior to submittal, Contractor should contact Engineering Services for complete details for issuance of a City haul permit.

### **3.8. LANDSCAPING AND IRRIGATION REQUIREMENTS**

As applicable, Contractor shall be required to construct the landscape and irrigation improvements in accordance with the requirements of MAG Specifications Sections 430, 440, and 795, and the City of Tempe Public Works Department Standard Landscape and Irrigation Details and Specifications, latest edition (available at the City of Tempe Engineering Division, 31 East Fifth Street for five dollars (\$5.00) or online at <http://www.tempe.gov/engineering>). In addition, the landscape plant establishment and maintenance period will be ninety (90) days.

### **3.9. SPECIFIC PRODUCTS OR BRANDS**

In accordance with MAG Specification 106.4, specific brands and/or models of equipment, materials, or patented processes listed in the plans, specifications, standard details, and standard specifications are for demonstrative purposes only. They should not be construed as a sole source request for a specific product or brand. Contractor shall provide City with the required product data including, but not limited to, manufacturers' standard catalog cuts, brochures, diagrams, schedules, performance charts, illustrations, calculations, schematic drawings, printed installation, erection, application, and placing instructions, and other descriptive data related to the product in order for City to determine if the product is equivalent to the product listed for approval.

### **3.10. ENVIRONMENTAL REQUIREMENTS**

**3.10.1.** Contractor covenants and agrees that it shall, at all times during the term of the Contract, and at its sole cost and expense, comply with and assume sole responsibility and liability under all environmental laws applicable to use of or operations at the project site by Contractor, its agents, assigns, and/or employees. Contractor agrees that should it or any of its agents, assigns, or employees know of (a) any violation of environmental laws relating to the project site, or (b) the escape, release, or threatened release of any hazardous materials in, on, under, or about the project site,

Contractor shall promptly notify City in writing of such, and that it will provide all warnings of exposure to hazardous materials in, on, under, or about the project site, in strict compliance with all applicable environmental laws. Further, Contractor covenants and agrees that it shall at no time use, analyze, generate, manufacture, produce, transport, store, treat, release, dispose of, or permit the escape of, or otherwise deposit in, on, under, or about the project site, any hazardous materials, or permit or allow any of its agents, assigns, or employees to do so. Prior to use of the project site, Contractor shall provide City an inventory of all equipment and materials stored and/or to be stored at the project site.

**3.10.2.** For purposes of this Contract, hazardous materials shall include but is not limited to, any and all substances, chemicals, wastes, sewage, or other materials that are now or hereafter regulated, controlled, or prohibited by any environmental laws, including, without limitation, any (a) substance defined as a “hazardous substance”, “extremely hazardous substance”, “hazardous material”, “hazardous chemical”, “hazardous waste”, “toxic substance”, or “air pollutant” by federal laws, including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601, *et seq.*; the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.*; the Hazardous Materials Transportation Act, 49 U.S.C. § 1801, *et seq.*, the Toxic Substances Control Act, 15 U.S.C. § 2601, *et seq.*, and all amendments thereto or other similar governmental restrictions; and (b) any chemical, compound, material, substance, or other matter that: (i) is a flammable explosive, asbestos, radioactive material, nuclear material, drug, vaccine, bacteria, virus, hazardous waste, toxic substance, injurious by itself or in combination with other materials; (ii) is controlled, designated in, or governed by any hazardous materials laws; (iii) gives rise to any reporting, notice, or publication requirements under any hazardous materials laws; or (iv) gives rise to any liability, responsibility, or duty on the part of City or Contractor with respect to any third person under any hazardous materials laws.

**3.10.3.** In addition, Contractor must comply with the following requirements:

- a. Non-pick-up sweepers will not be allowed except as required to make joints during chip sealing operations.
- b. Water flooding of trenches with potable water will not be permitted.
- c. All paints applied by sprayers shall be of a water-based type.
- d. Provisions shall be made to prevent the discharge of construction silt, mud, and debris into City storm drains or streets.

- e. Spills of oil, gas, chemical, or any other hazardous materials must be reported and removed by approved procedures. Mitigation measures shall be taken to prevent contamination of construction storage sites.
- f. Concrete waste must be disposed of in an approved location and at least twenty-five (25) feet from established landscaping.
- g. City refuse roll-off containers shall be used on City projects unless otherwise directed by the City of Tempe Solid Waste Supervisor. If you should have any questions concerning any of the requirements or charges, please contact the Solid Waste Supervisor, at 480-350-8268.
- h. Hazardous wastes shall not be discharged into City's sanitary sewers or storm drainage system. All waste products shall be disposed of in accordance with applicable regulations.
- i. When archaeological features are encountered or unearthed, Contractor shall promptly report to the Director of the Arizona State Museum and to City. Excavation shall not resume in the identified area until approved by City Engineer.
- j. Contractor shall take whatever steps, procedures, or means to prevent abnormal, material spillage, or tracking conditions due to their construction operations in connection with the Contract. The dust control measures shall be maintained at all times during construction of the project, to the satisfaction of City Engineer, in accordance with Rule 200 of the Maricopa County Health Department Air Pollution Control Regulations, which require that an Earth Moving Permit be issued and a Control Plan be approved prior to commencement of work. Contact Maricopa County at 602-506-6700 for details.
- k. Contractor shall comply with all applicable federal regulations concerning National Pollutant Discharge Elimination System (NPDES) permits for storm discharges from construction sites.
- l. All materials supplied by Contractor shall be one hundred percent (100%) asbestos free unless otherwise approved by City.

No additional payment will be made for compliance with the above items.

In addition to the above, the use of new products made with reclaimed material and that meet project specifications is encouraged.

#### **3.10.4. Federal Environmental Mitigation measures**

- a. See Technical Specifications. These mitigation measures are not subject to change without prior written approval from the Federal Highway Administration.



### **3.11. SAFETY REQUIREMENTS**

Contractor shall comply with all applicable federal, state, and local health and safety regulations, ordinances, and requirements including, but not limited to, the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 *et seq.*), and all rules, regulations, and orders adopted pursuant thereto.

### **3.12. TRAFFIC CONTROL**

**3.12.1.** All traffic shall be regulated in accordance with the MAG Specifications; the City of Tempe Traffic Barricade Manual, latest edition; the Manual on Uniform Traffic Control Devices (MUTCD); and any special provisions included herein.

At the time of the pre-construction conference, Contractor shall designate an American Traffic Safety Services Association (ATSSA) certified individual, who is well qualified and experienced in construction traffic control and safety, to be responsible for implementing, monitoring, and altering traffic control measures, as necessary, to ensure that traffic is carried through the work area in an effective manner and that motorists, pedestrians, bicyclists, and workers are protected from hazard including, but not limited to, motor vehicle accidents. City shall designate a representative who will oversee and monitor Contractor's agent and enforce City's requirements set forth herein. Contractor covenants to give City any assignment and/or assurances which may be necessary to effect such right of direct enforcement.

Contractor is solely responsible for, and assumes full liability for, the traffic control relating to this project. Contractor shall submit a final traffic control plan to City for its review and approval no less than one (1) week prior to commencing work under this Contract. Traffic, as referenced herein, shall include any and all motor vehicles, bicyclists, and pedestrian traffic on roadways, sidewalks, bicycle paths, alleys, and/or rights of way at, attendant to, and/or adjacent to the Project.

In the event alteration of traffic control is required for work or services provided herein, alterations shall be made in accordance with the latest edition of Part VI of the Manual on Uniform Traffic Control Devices, "Traffic Control for Streets and Highway Construction and Maintenance Operations," or the City of Tempe Traffic Barricade Manual, latest edition. The most restrictive provision shall apply. Unless identified otherwise in the Technical Specifications, City will undertake no responsibility or expenses relating to measurement, payment, or alteration of traffic control. All costs or expenses related to traffic control shall be considered incidental to other pay items. Any and all revisions relating to traffic and/or traffic control shall be submitted to City for review and approval in City's sole discretion.

Contractor is solely responsible for any and all loss, damage, replacement, or repair necessitated to any traffic signal equipment, traffic signal conduit, and/or circuits, arising from or relating to Contractor's work or services performed hereunder. Contractor shall have all repairs performed immediately at its sole expense by a licensed electrical contractor with experience in traffic signal repair, subject to pre-approval by City. Any and all repairs and/or replacement costs expended by City in this regard shall be reimbursed by Contractor at twice City's actual cost.

Contractor shall notify all adjacent or affected residents or businesses at least forty-eight (48) hours in advance of any street, alley, sidewalk, and/or driveway closures or modifications, and make suitable arrangements to have all vehicles moved to a satisfactory location outside the closed area. Pedestrian access shall be maintained along the length of the project at all times per the requirements of the Americans with Disabilities Act and as approved by City. Contractor shall abide by applicable speed limits. Additional information may be obtained by contacting the City Transportation Division at 480-350-8219.

#### **3.12.2. Temporary Barricades**

Temporary barricades shall be regulated in accordance with the City of Tempe Traffic Barricade Manual, latest edition.

No additional payment by City will be made to Contractor or its subcontractor for temporary barricades, unless otherwise specified in the bid.

#### **3.13. CLEAN-UP**

Contractor agrees and covenants to adequately protect the work site, adjacent property, and the public in all phases of the work and/or services provided herein. Contractor shall be solely responsible for all damages or injuries due to action or neglect pursuant to this section. Contractor shall maintain access to all phases of the project pending inspection by City. Contractor hereby agrees to the following as to the job site: continually keep the job site free from debris, waste, and accumulation of materials; immediately clean up any oil, fuel, or chemical spills and take any and all remediation necessary; keep machinery clean and free of weeds and debris; remove all construction stains, smears, and debris from finished surfaces; perform site preparation to limit the spread of weeds, debris, and other nuisances prior to submission of final invoice to City; and remove all equipment, materials, tools, and Contractor's personal property prior to submission of final invoice to City.

In accordance with MAG Specifications Section 105, Contractor shall respond within twenty-four (24) hours after notice by City of any defects and/or

maintenance requests to immediately remedy the condition of the job site. Should Contractor fail to respond promptly as set forth herein, City shall correct the job site at the expense of Contractor, and recover all attendant costs.

**3.14. APPROXIMATE QUANTITIES**

It is expressly understood and agreed by the parties hereto that the quantities of the various classes of work to be done and material to be furnished under this Contract, which have been estimated, as stated in the Invitation for Bids, are only approximate and are to be used solely for the purpose of comparing, on a consistent basis, the bids offered for the work under this Contract. Contractor further agrees that City will not be held responsible for any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work as estimated and the work actually done.

If any error, omission, or misstatement is found to occur in the estimated quantities, the same shall not invalidate this Contract or release Contractor from the execution and completion of the whole or any part of the work in accordance with the plans and specifications herein mentioned, and for the prices herein agreed upon and fixed therefore, or excuse Contractor from any of the obligations or liabilities hereunder, or entitle Contractor to any damages or compensation, except as may be provided for in this Contract.

**3.15. BLUE STAKE & CALL BEFORE YOU DIG**

Contractor is required to use Arizona Blue Stake, Inc., at 602-263-1100, to comply with the statutory requirements in A.R.S. title 40, chapter 2, article 6.3 (Underground Facilities); A.R.S. § 40-360.21, *et seq.*, as amended from time to time.

Where railroad property may be impacted, Contractor must also notify and secure a current Call Before You Dig (CBUD) Ticket at 1-800-336-9193 from Union Pacific Railroad's Response Management Communications Center (RMCC), wait for the site to be marked, respect all markings, and dig with care.

**3.16. PROTECTION OF EXISTING FACILITIES**

Contractor shall protect all existing facilities during construction or work. Utility poles that may be affected by construction activities shall be protected and/or braced by Contractor. Contractor shall notify the appropriate utility company or agency of any construction or work that may affect their facilities and state the course of action which will be taken to protect such facilities.

**3.17. UNDERGROUND UTILITIES**

Underground utilities indicated on the plans are in accordance with maps furnished by City and by each utility company. The locations are approximate and

require verification prior to construction, as mandated by the City of Tempe Utility Permit and Construction Manual, latest edition, available at <http://www.tempe.gov/engineering>.

**3.18. RELOCATION OF UTILITIES**

All utilities in conflict with the new work will be relocated by the utility company, except as otherwise provided in the plans and specifications.

**3.19. NOTIFICATION OF PROPERTY OWNERS**

Contractor shall notify all property owners who may be affected by the proposed construction activities of the scope and duration of the construction activities at least forty-eight (48) hours in advance of the start of any work or construction.

**3.20. ACCESS**

Contractor shall maintain public access to businesses adjacent to the job site at all times during construction. Where property has more than one access point, no more than one access point shall be restricted or closed at any one time. If only one driveway exists, access shall be maintained to at least one-half of the driveway at all times. Access to adjacent private driveways shall be maintained by Contractor during all non-working hours.

**3.21. UTILITY AND PUBLIC AGENCY CONSTRUCTION CLEARANCE AGREEMENT**

Utilities and other public agencies may require all contractors, if working on their facilities, to sign a standard form "Construction Clearance Agreement," or other form of agreement, prior to issuance of a license. Contractor shall execute the Construction Clearance Agreement with the utility or public agency, if required, and furnish a copy to City prior to proceeding with any construction on utility or public agency facilities. This agreement sets forth the requirements to complete the proposed work in an allotted time frame or to pay full costs for others to complete. It also obligates Contractor to comply with all applicable federal, state, and local laws, rules, regulations, and ordinances including, but not limited to, the OSHA Permit Required Confined Space rules, as amended.

**3.22. GOVERNMENT APPROVALS AND PERMITS**

**3.22.1.** Unless otherwise provided, Contractor shall obtain all necessary permits, approvals, and licenses required for the commencement of the work from any government or quasi-government entity having jurisdiction over the project at its sole expense. Contractor expressly covenants and agrees that it will obtain any and all necessary environmental permits and/or file the necessary environmental notices at its cost prior to undertaking work or performing services hereunder.

- 3.22.2.** Copies of all permits and notices shall be provided to City prior to starting any work or performing services pursuant to the permitted activity. This provision does not constitute an assumption by City of an obligation of any kind for violation of said permit or notice requirements.
- 3.22.3.** City agrees to be responsible for City's own review and permit(s) fees for building and demolition permits only. In addition, City shall bear its own review fees for grading and drainage, water, sewer, and landscaping. City may agree to pay utility design fees for permanent services in its sole discretion. Contractor shall be solely responsible for any and all other permit(s) and review fees not specifically designated herein.
- 3.22.4.** Contractor is responsible for all costs of water meter(s), water and sewer taps, fire lines and taps, and all water bills on the project meters until completion of the project. Arrangements for water at the site or for construction purposes are Contractor's sole responsibility.

**3.23. KEY CONTACTS**

Blue Stake Center	602-263-1100
Call Before You Dig (UPRR)	800-336-9193

**3.24. DUST PREVENTION**

Contractor shall take all necessary steps to ensure dust-free conditions on property within the City to the satisfaction of the City Engineer, and fully comply with A.R.S. § 49-474.06 and Maricopa County Air Pollution Control Rules and Regulations Rule 200 § 305-306, concerning dust-generating operations as defined by Maricopa County Rule 310. In any operation where more than one-tenth of an acre of surface area is disturbed and/or when unpaved onsite haul roads are used, Contractor shall obtain a Maricopa County dust control permit. Contractor shall provide assurance that subcontractors used on the dust-generating portion of the Project are registered with the Maricopa County Air Quality Department and that only certified PM-10 efficient street sweepers shall be used to sweep City streets, as required by Tempe City Code Sec. 26A-25. Contractor shall provide its subcontractor(s)' registration number and dust control plan, if applicable, to the City Engineer prior to engaging in any dust-generating activities. Project related hauling activities to and/or from storage located on property owned by City shall be listed on the approved dust control permit and shall be subject to control measures in the approved dust control plan. When hauling fill or excavation materials exceeding five thousand (5,000) cubic yards or when the duration of the haul is more than ten (10) working days, Contractor shall obtain a City haul permit before the hauling operation begins. Prior to receiving a haul permit, Contractor must submit the required certificate of

insurance, a plan showing the proposed haul routes, and a complete schedule of the hauling operation to the City Engineer.

All costs associated with the submittal, approval, and implementation of the permit and dust control plan as approved by Maricopa County Air Quality Department shall be borne solely by Contractor. Failure to fully comply with this provision shall be considered a material breach of the Contract, and shall subject the Contract to termination by the City, in addition to other legal remedies.

### **3.25. COMPLAINTS FROM THE GENERAL PUBLIC**

Contractor shall respond to any and all claims or complaints from the general public in a reasonable and prompt manner. Information on any complaint shall be reported to the Project Manager promptly, but in no event more than forty-eight (48) hours of receipt of complaint.

## **4. INSTRUCTION TO BIDDERS**

### **4.1. SEALED BIDS**

Sealed bids will be received and the time of delivery recorded by the City of Tempe, Arizona, Public Works Department, Engineering Office, City Hall West Garden Level, 31 East Fifth Street, Tempe, Arizona 85281, until **9:00 a.m. (Arizona time) September 13, 2017**. At that time and place, bids will be opened and the amount of each bid and the name of each bidder publicly read in the Public Works Conference Room. Bids received after the time specified will be returned unopened. All bids shall be submitted in a sealed envelope. The outside lower right-hand corner shall be marked:

**BID OF \_\_\_\_\_, CONTRACTOR**

**FOR: FIBER OPTIC CABLE INSTALLATION – RURAL ROAD  
FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD  
PROJECT NO. 6907261**

**FEDERAL AID PROJECT NO. TMP-0(240)D  
ADOT TRACS NO. 0000 MA TMP SZ166 01C**

If a bid is mailed or delivered via overnight mail service, the outside envelope should be marked with the **date and time of the bid opening, as well as the words “PUBLIC WORKS ENGINEERING BID OPENING.”** Please allow sufficient time for delivery.

Please see the BIDDER’S CHECK SHEET in the Exhibits section of this Invitation for Bid.

Each bid shall be accompanied by a bid guarantee for ten percent (10%) of the amount of the bid. See the subsection of Instructions to Bidders titled Bid Security.

Each bid also shall be accompanied, in a separate envelope, by the bidder's current loss history information from all of the bidder's insurance carriers. The information specific to workers' compensation insurance carriers must include a three-year (3-year) history of the bidder's Experience Modification Factor (EMOD) and its loss ratio.

**Plans and specifications are available for download from the City of Tempe Engineering Division at [www.tempe.gov/engprojectsbidding](http://www.tempe.gov/engprojectsbidding). When the documents are downloaded, contractors MUST register on-line as a plan holder to be notified of project addenda. If addenda are issued for this project the City of Tempe will attempt to notify plan holders at the email address provided. It is contractor's sole responsibility to confirm that they have received all addenda prior to submitting a bid. The City is not responsible for providing notification or addenda to contractors.**

When it is in the best interests of the City of Tempe, the City may cancel this solicitation, or may reject any and all bids in whole or in part, or may waive any informalities in the bids received.

Award will be made or bids rejected within sixty (60) days after bid opening.

**During the bidding process, any questions shall be submitted to Wendy Springborn, Engineering Services Manager, at [wendy\\_springborn@tempe.gov](mailto:wendy_springborn@tempe.gov) no later than 5:00 p.m., September 5, 2017. Any questions submitted after this deadline will not be considered.**

**Anyone wishing to receive future notices through automatic notification by email can register their company name and email address at [www.tempe.gov/enews](http://www.tempe.gov/enews) (select the following e-notify list: Engineering Bid/RFQ Notification).**

#### **4.2. ADDENDA**

Addenda issued prior to the deadline for bidding shall be attached to and made a part of the Contract. Contractor shall acknowledge receipt of all addenda on the Competitive Sealed Bid form.

#### **4.3. BID SECURITY**

Each bid shall be accompanied by a bid guarantee for ten percent (10%) of the amount of the bid, executed in accordance with the requirements of A.R.S. § 34-201, *et seq.*, as amended from time to time. The bid guarantee shall be in the form of a certified check, cashier's check, or surety bond. If a surety bond is used, the

bond shall be executed solely by a surety company or companies holding a certificate of authority to transact surety business in Arizona, issued by the director of the department of insurance pursuant to Arizona Revised Statutes, title 20, chapter 2, article 1, as amended from time to time. The surety bond shall not be executed by an individual surety or sureties, even if the requirements of A.R.S. § 7-101 are satisfied. Additionally, the City requires that a bonding company, liability insurance carrier, or excess insurance carrier issuing a surety bond have a Financial Strength Rating of A- or better and a Financial Size Category of VII or higher, as listed in the most recent "Best's Key Rating Guide – Property/Casualty," published by A.M. Best Company.

Bid guarantees shall be returned to bidders whose bids are not accepted, and to the successful Contractor upon its execution of the Contract and delivery of a satisfactory performance bond, payment bond, and certificate of insurance.

#### **4.4. BIDS**

Bids shall be properly executed upon the Competitive Sealed Bid Forms attached and made a part of this Contract. Electronic signatures will not be accepted. The completed forms shall be without interlineations, alterations, or erasures. Unit prices should be rounded to the nearest whole cent (two spaces behind the decimal point). In case of an error in the extension of unit prices and the totals, the unit price shall govern.

Bids shall not contain any recapitulations of the work to be done. Alternative bids will not be considered except as called for. No oral or electronic bids or modifications will be considered.

#### **4.5. IRREGULAR BIDS**

Bids may be considered irregular and may be rejected if any of the unit prices quoted in the bidding schedule are unbalanced, either above or below the amount of a reasonable bid price, to the potential detriment of City.

#### **4.6. BIDDING PHASE REQUIREMENTS**

**4.6.1.** Pursuant to A.R.S. § 1-502, any individual/sole proprietor (unincorporated business) who responds to this Invitation for Bids by signing the Competitive Sealed Bid Forms shall also sign a sworn Affidavit Demonstrating Lawful Presence in the United States (see Exhibits) and present one of the documents listed on the affidavit to verify lawful presence in the United States. Failure to sign said affidavit and present one of the listed documents **shall result in rejection of the bid.**

**4.6.2.** Each bid shall be accompanied, in a separate envelope, by the bidder's current loss history information from all of the bidder's insurance carriers.



The information specific to workers' compensation insurance carriers must include a three-year (3-year) history of the bidder's Experience Modification Factor (EMOD) and its loss ratio. This information must be provided with the bidder's proposal.

**4.7. PRE-CONTRACT AWARD REQUIREMENTS**

**4.7.1.** Contractor shall provide a copy of its written health and safety program and any required employee training records or certificates.

**4.7.2. Taxes.** All applicable taxes due and owing by Contractor and all subcontractors shall be considered by City in determining award. At all times, the determination of applicable taxes and rates, and remitting taxes owed, shall be the sole responsibility of Contractor.

It is the sole responsibility of the Contractor and any subcontractors to obtain a Letter of Good Standing from the Arizona Department of Revenue prior to Contract award. Go to <https://azdor.gov/Collections.aspx> to obtain directions regarding how to submit for the Letter of Good Standing.

In the event a "denial" letter is received from the Arizona Department of Revenue, should any taxes owed by Contractor or any subcontractors not be remitted in full prior to Contract award along with the receipt of a Letter of Good Standing from Contractor and each subcontractor, the bid shall be considered non-responsive and rejected by the City.

**4.8. BID QUANTITIES**

The quantities listed in the specifications are for bid purposes. The actual quantities provided to Contractor may be adjusted to accommodate field requirements.

**4.9. PROTEST PROCEDURE**

A bidder or contractor who believes they are aggrieved in connection with the City's solicitation or award of a contract may file a protest with the Engineering Division procurement office, as set forth in Section 26A-21 of the Tempe City Code.

**4.10. NO LOCAL PREFERENCE**

In accordance with 49 CFR 18.36(c)(2), Tempe will conduct procurements in a manner that prohibits the use of statutorily or administratively imposed in-State or local geographical preferences in the evaluation of bids, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference.

## **5. EVALUATION AND AWARD**

### **5.1. AWARD AND EXECUTION OF CONTRACT**

Except as provided herein to the contrary, the respective rights and remedies of the parties to this Contract shall be cumulative and in addition to any rights and remedies not specified in this Contract. It is understood that there are no oral or written agreements or representations between the parties hereto affecting this Contract, and that this Contract supersedes any and all prior negotiations, arrangements, representations, and understandings between the parties. No provision of this Contract may be amended except by an agreement in writing signed by City. This Contract, including exhibits and attachments attached hereto, signed by City and Contractor, constitutes the entire agreement between the parties.

This Contract shall be in full force and effect only after it has been awarded by the City Council of Tempe, Arizona.

Contractor shall execute the Contract and all exhibits and attachments thereto, counterparts permitted, within ten (10) calendar days after being given formal notice of City Council's award of the Contract.

Contractor's failure to execute this Contract and to file satisfactory contract bonds and insurance certificates as provided herein within ten (10) calendar days after being given formal notice of Contract award shall result in immediate cancellation of the award.

### **5.2. PLANS TO THE SUCCESSFUL BIDDER**

The successful bidder may obtain (7) sets of plans and specifications for this project from the office of City Engineer, at no cost.

### **5.3. ISSUANCE OF THE NOTICE TO PROCEED**

Notwithstanding unforeseeable circumstances, the Notice to Proceed shall be issued by City within sixty (60) calendar days of contract award.

## **6. GENERAL TERMS AND CONDITIONS**

### **6.1. LIQUIDATED DAMAGES**

Unless otherwise specified, liquidated damages will be applied in accordance with the MAG Specifications 108.9. Completion of the work as stated in this Contract is the same as completion of the work as stated in MAG Specifications 108.9. Damages will be applied at the amounts specified in MAG Specifications Table 108-1.

## **6.2. ESCROW AND HOLDBACK**

In the event of a dispute arising under this Contract that is not summarily resolved by the parties concerning any withholding or nonpayment of funds by the City, the parties agree that said disputed funds may be held back and placed into a neutral escrow account, in the form of an interest bearing savings account, until the dispute is resolved. By signing this Contract, Contractor acknowledges and agrees to the deposit of any and all disputed funds into an escrow account into the financial institution of the City's election.

Except as to those amounts withheld, at City's direction, the balance of the funds shall be paid to Contractor or subcontractor(s), as set forth by Arizona law. Any funds remitted to City in excess of the amount allowed by statute will be reimbursed to Contractor. In no event shall City be liable to Contractor for damages resulting from a claimed loss due to payment of the excess funds or due to a delay in reimbursing the excess payment.

Once per calendar month, the financial institution shall furnish the City and Contractor with a statement reflecting the funds held as of the last day of the preceding calendar month, and showing the transactions for that prior month. At the request of Contractor or City, the financial institution shall furnish both parties with an interim statement showing funds held as of the 25th day of the most recent month or, if a non-business day, the following business day of that month.

Contractor acknowledges and agrees that all fees, costs, and charges imposed by any financial institution in connection with the maintenance and administration of the disputed funds shall be charged to, and paid by, Contractor. The funds shall be free of any claim for such fees, costs, or charges. However, the financial institution may obtain payment for any such accrued fees, costs, and charges owed by Contractor related to said funds out of available interest earned on the funds, or deduct the same from any funds to be paid to Contractor, according to written disbursement instructions from City.

The parties acknowledge and agree that in the event of no resolution between the parties concerning distribution of the disputed funds, the funds may be interplead in a court of competent jurisdiction in Maricopa County, Arizona.

It is understood that financial institution shall not be deemed liable, nor responsible, for the collectability of any funds assigned or held in connection with this provision.

## **6.3. TERMINATION**

In addition to MAG Specifications 108.11, City, at its sole discretion, may terminate this Contract for convenience or abandon any portion of the project for

which services have not been performed by Contractor, upon fourteen (14) days' written notice delivered to Contractor personally or by certified mail.

Immediately after receiving such notice, Contractor shall discontinue advancing the services under this Contract and proceed to close said operations under this Contract. Contractor shall appraise the services it has completed and submit an appraisal to City for evaluation. City shall have the right to inspect and approve Contractor's work to appraise the services completed.

Contractor shall deliver to City all drawings, special provisions, field survey notes, reports, estimates, and any and all other documents or work product generated by Contractor under the Contract, entirely or partially completed, together with all unused materials supplied by City.

In the event of such termination or abandonment, Contractor shall be paid for services approved and accepted by City that Contractor performed prior to receipt of said notice of termination, including reimbursable expenses previously incurred.

If the remuneration scheduled hereunder is based upon a fixed fee or definitely ascertainable sum, the portion of such sum payable shall be proportionate to the percentage of work completed, as reviewed and approved by City, based upon the scope of work. However, in no event shall the fee exceed the full cost of the Contract.

If City terminates or abandons the Contract, City shall make final payment within sixty (60) days after Contractor has delivered the last of the completed items and City has approved and determined the final fee.

In the event this Contract is terminated or abandoned prior to completion, City may complete the work, or enter into a Contract with another party for the remaining work.

In no event shall the City be obligated, liable, or responsible for performance of the obligations set forth herein, any provision of this Contract, or any expenses incurred by Contractor in securing this Contract (including, but not limited to, purchasing insurance coverage, performance bonds, or other security), at any time, including prior to or following City Council's approval of this Contract, should funds not be appropriated by the City through its Council or staff, in order to complete the Project. In the event that funds are not appropriated to meet or complete this Contract, then City shall immediately provide notice to Contractor of such non-allocation and terminate the Contract. City shall incur no resulting liabilities or penalties for termination under this Section.

This Contract may be terminated pursuant to A.R.S. § 38-511.

#### **6.4. DEFAULT PROVISIONS**

Contractor shall be deemed in default under this Contract upon the occurrence of any of the following events:

- 6.4.1. Contractor provides material that does not meet the specifications of the Contract and fails to cure such non-performance within ten (10) days after written notice from City;
- 6.4.2. Contractor fails to adequately perform the services set forth in the plans and specifications of and fails to cure such non-performance within ten (10) days after written notice from City;
- 6.4.3. Contractor fails to complete the work required or furnish the materials required within the time stipulated in the Contract and fails to cure such non-performance within ten (10) days after written notice from City;
- 6.4.4. Contractor fails to make progress in the performance of the Contract and/or gives City reason to believe that Contractor will not or cannot perform the requirements of the Contract and fails to cure such non-performance within ten (10) days after written notice from City;
- 6.4.5. Contractor fails to perform any other term or condition of this Contract and fails to cure such non-performance within ten (10) days after written notice from City.

In the case of default, City may terminate the Contract, in whole or in part, and/or may resort to any other remedy as provided by law. City may also perform any test or analysis on materials for compliance with the specifications of the Contract. Contractor shall pay the actual expense of testing if the results of any test or analysis indicate a material to be non-compliant with the specifications.

#### **6.5. WARRANTY**

Contractor warrants to City that the construction, including all materials and equipment furnished as part of the construction, shall be new, unless otherwise specified in the Specifications and Contract; of good quality; in conformance with the Specifications; and free of defects in materials and workmanship. Contractor's warranty obligation excludes defects caused by abuse, alterations, or unreasonable failure to maintain the construction by persons other than Contractor, Subcontractors, or others under Contractor's control. Nothing in this warranty shall limit any manufacturer's warranty which provides City with greater warranty rights than set forth herein. Contractor will provide City with all manufacturers' warranties and operation and maintenance manuals upon substantial completion of the work. Contractor's warranty shall be for one (1) year and will commence for all portions of the work upon final acceptance of the entire work as determined by City under the Contract. All statutory or other

warranties, express or implied, related to latent defects will remain in force and are not limited by this provision.

**6.6. OWNERSHIP OF DOCUMENTS / INFRINGEMENT OF PATENT OR COPYRIGHT**

All work products (electronically or manually generated) including, but not limited to, plans, specifications, cost estimates, tracings, studies, design analyses, original mylar drawings, computer aided drafting and design (CADD) file diskettes which reflect all final drawings, and other related products which are prepared in the performance of this Contract, are the property of City and are to be delivered to City before the final payment is made to Contractor. City shall retain ownership of these original drawings, however, if approved in writing by City, Contractor may retain the original drawings and supply City with reproducible mylar copies. Contractor shall endorse by their professional seal all plans and special provisions furnished by them.

In the event these documents are used for another project without further consultation with Contractor, City agrees to indemnify and hold Contractor harmless from any claim arising from the reuse of the documents. City shall remove Contractor's seal and title block from such documents.

Contractor agrees to save, keep, hold harmless, and fully indemnify City, and any of its officers, officials, employees, and agents, from any and all damages, costs, or expenses, in law or equity, that may at any time arise out of any infringement of the patent right, copyright, or trademark of any person, persons, or entity in consequence of use by City, or by any of its officers, officials, employees, or agents, of materials supplied by Contractor, and of which Contractor is not a patentee or signee or lawfully entitled to sell the same.

Contractor agrees to indemnify and hold harmless City and its officers, officials, employees, and agents from any and all license, royalty, and proprietary fees or costs, including legal costs, which may arise out of City's purchase and use of goods supplied by Contractor.

It is expressly agreed by Contractor that these covenants are irrevocable and perpetual.

**6.7. COMPLIANCE WITH STATE AND FEDERAL LAWS**

**6.7.1. Specially Designated Nationals and Blocked Persons List.** Contractor represents and warrants to City that neither Contractor nor any affiliate or representative of Contractor (i) is listed on the Specially Designated Nationals and Blocked Persons List maintained by the Office of Foreign Asset Control, Department of the Treasury (OFAC) pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 ("Order"); (ii) is listed on any other list of terrorists or terrorist organizations maintained pursuant to the Order,

the rules and regulations of OFAC or any other applicable requirements contained in any enabling legislation or other related Order(s); (iii) is engaged in activities prohibited in the Order; or (iv) has been convicted, pleaded *nolo contendere*, indicted, arraigned, or custodially detained on charges involving money laundering or predicate crimes to money laundering.

- 6.7.2. **Employment Laws.** Contractor agrees and covenants that it will comply with any and all applicable governmental restrictions, regulations, and rules of duly constituted authorities having jurisdiction insofar as the performance of the work and services pursuant to the Contract, and all applicable safety and employment laws, rules, and regulations, including, but not limited to, the Fair Labor Standards Act, the Walsh-Healey Act, and the Legal Arizona Workers Act (LAWA), and all amendments thereto, along with all attendant laws, rules, and regulations. Contractor acknowledges that a breach of this warranty is a material breach of this Contract and that Contractor is subject to penalties for violation(s) of this provision, including termination of this Contract. City retains the right to inspect the documents of any and all contractors, subcontractors, and sub-subcontractors performing work and/or services relating to the Contract to ensure compliance with this warranty. Any and all costs associated with City inspection are the sole responsibility of Contractor. Contractor hereby agrees to indemnify, defend, and hold City harmless for, from, and against all losses and liabilities arising from any and all violations thereof.
- 6.7.3. **Equal Opportunity.** City is an equal opportunity, affirmative action employer. Contractor hereby covenants that it shall not discriminate unlawfully against any employee or applicant for employment, nor shall it deny the benefits of this Contract, to any person on the basis of race, color, creed, religion, ancestry, national origin, physical or mental disability, age, sex, gender, sexual orientation, gender identity, marital status, or veteran status, with regard to discharging obligations under this Contract. Contractor covenants and agrees that it will comply in all respects with the applicable provisions of Executive Order 11246, Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act, the Age Discrimination in Employment Act, the Vietnam Era Veterans' Readjustment Assistance Act, the Rehabilitation Act, and any other applicable state and federal statutes governing equal opportunity. Contractor agrees to post hereinafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the contracting officer setting for the provisions of this clause.
- 6.7.4. **Federal Employer Sanctions Law.** Contractor understands and acknowledges the applicability of the Federal Employment Eligibility Verification Requirements ("Requirements"), including, but not limited to, Executive Order 12989, Federal Acquisition Regulation E-Verify clause (73 F.R. 67704), and 8 U.S.C. § 1324, *et seq.*, as amended from time to

time. Contractor warrants current compliance with these and all Federal immigration laws and regulations that relate to their employees, on behalf of Contractor and all of its subcontractors, including the use of E-Verify to confirm the employment eligibility of all persons hired during a Contract term and current employees performing under the Contract within the United States. Should the Requirements conflict with any applicable state laws or regulations as referenced in 6.7.2., the Requirements shall prevail.

**6.7.5. Boycott.** Contractor certifies that it is not currently engaged in, and agrees for the duration of this Contract/Agreement that it will not engage in, a boycott of Israel, as that term is defined in A.R.S. § 35-393.

**6.7.6. Bidders/Proposers List.** In compliance with 49 CFR Part 26.11, ADOT requires contractors and consultants submitting a bid, proposal, or statement of qualifications to work on a federally funded transportation project, to provide ADOT with a list of every firm who expressed interest in or submitted a bid or proposal to work on the project. Any firm being awarded work as a prime or subcontractor MUST be AZ UTRACS.

All companies and subs who are bidding or have expressed interest in the project must be registered through the online form at <https://utracs.azdot.gov/BiddersListInfo/>. All registrations must be completed within five (5) calendar days after bid opening **with** a confirmation email sent to the City of Tempe no later than that fifth (5<sup>th</sup>) date by 4:00p.m., (Arizona time).

Contractor further agrees to include the provisions of this section in any and all subcontracts hereunder. Any violation of such provisions shall constitute a material breach of this Contract.

## **6.8. ANTIDISCRIMINATION**

Contractor shall not refuse to hire or employ or bar or discharge from employment any person, or discriminate against such person in compensation, conditions, or privileges of employment because of race, color, gender, gender identity, sexual orientation, religion, national origin, familial status, age, disability, or United States military veteran status. Contractor shall provide a copy of its antidiscrimination policy to City to confirm compliance with this requirement or attest in writing to compliance based upon criteria outlined in Exhibit 8.13.

## **6.9. JURISDICTION**

This Contract will be deemed to be made under, and will be construed in accordance with and governed by, the laws of the State of Arizona, without regard to the conflicts or choice of law provisions. An action to enforce any provision of this Contract or to obtain any remedy with respect hereto will be brought in the



Superior Court of Arizona in and for Maricopa County, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

**6.10. DISPUTE RESOLUTION**

The parties may mutually agree to submit any dispute arising under this Contract to binding arbitration, conducted by a sole arbitrator mutually agreed upon by the parties, to hear and render a decision to resolve said dispute. The arbitration shall be held in Tempe, Arizona, subject to the laws of the State of Arizona. Each party shall bear its own costs and attorney's fees. A decision shall be made by the arbitrator within seven (7) calendar days of the arbitration hearing.

**6.11. SUCCESSORS AND ASSIGNS**

This Contract shall not be assignable except at the written consent of City, and it shall extend to and be binding upon the heirs, executors, administrators, successors, and assigns of the parties hereto.

**6.12. NON-WAIVER**

The failure of either party to enforce any of the provisions of this Contract, or to require performance by the other party of any of the provisions of this Contract, will not be construed as a waiver of such provisions, nor will it affect the validity of this Contract or any part thereof or the right of either party to thereafter enforce each provision.

**6.13. SURVIVAL**

All warranties, representations, and indemnifications by Contractor will survive the completion or termination of this Contract.

**6.14. SEVERABILITY**

If any provision of this Contract or the application thereof to any person or circumstance is held invalid, illegal or unenforceable to any extent, the remainder of this Contract and the application thereof will not be affected and will be enforceable to the fullest extent permitted by law.

**6.15. INTEGRATION**

This Contract contains the full agreement of the parties hereto. Any prior or contemporaneous written or oral agreement between the parties regarding the subject matter hereof is merged and superseded hereby.

**6.16. TIME IS OF THE ESSENCE**

Time of each of the terms, covenants, and conditions of this Contract is hereby expressly made of the essence.

**6.17. THIRD PARTY BENEFICIARY**

This Contract will not be construed to give any rights or benefits in the Contract to anyone other than City and Contractor. All duties and responsibilities undertaken pursuant to this Contract will be for the sole and exclusive benefit of City and Contractor and not for the benefit of any other party.

**6.18. CONFLICT OF INTEREST**

Contractor agrees to disclose any financial or economic interest with the project property, or any property affected by the project, existing prior to the execution of this Contract. Further, Contractor agrees to disclose any financial or economic interest with the project property, or any property affected by the project, if Contractor gains such interest during the course of this Contract.

Contractor's gains of financial or economic interest in the project during the course of this Contract may be grounds for terminating this Contract. Any decision to terminate the Contract shall be at the sole discretion of City.

Contractor shall not engage the services, on this Contract, of any present or former City employee who was involved as a decision maker in the selection or approval processes, or who negotiated or approved billings or Contract modifications for this Contract.

**6.19. COOPERATION AND FURTHER DOCUMENTATION**

Contractor agrees to provide City such duly executed documents as may be reasonably requested by City to implement the intent of this Contract.

This Contract shall be in full force and effect only when it has been approved by the City Council of the City of Tempe, Arizona, and when executed by the duly authorized City officials and the duly authorized agent of Contractor.

Each proposed subcontractor for this project must be approved by City before that subcontractor may work on the project. For the approval process, Contractor shall obtain from each subcontractor, and submit to City, a completed Labor Standards Certification form (see the Exhibits section).

Contractor also shall provide City with a complete copy of each executed subcontract and purchase order for this project.

**6.20. UNAUTHORIZED FIREARMS & EXPLOSIVES**

No person conducting business on City property shall carry a firearm or explosive of any type. This requirement shall also apply to persons who maintain a concealed weapons permit.

**6.21. NOTICES TO CITY ENGINEER**

All notices to the City relating to this Contract should be sent to the following individual, who is also the administrator of this Contract.

Fiber Optic Cable Installation and ITS Improvements – Rural Road from  
Alexander Boulevard to McKellips Road  
Marilyn DeRosa, P.E., R.G., City Engineer  
City of Tempe Engineering Division  
31 E. Fifth Street, Garden Level  
Tempe, Arizona 85281  
480-350-8200

**6.22. NOTICES TO CONTRACTOR**

*(To be completed by successful bidder)*

\_\_\_\_\_  
Printed Name of Signatory

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

**6.23. GIS DATA DISCLAIMER**

THE CITY OF TEMPE DOES NOT WARRANT THE ACCURACY, COMPLETENESS, CONDITION, SUITABILITY, PERFORMANCE, OR CURRENCY OF THE GIS DATA PROVIDED UNDER THIS CONTRACT. AREAS DEPICTED BY GIS DATA ARE APPROXIMATE, AND NOT GUARANTEED TO BE ACCURATE TO STANDARDS FOR MAPPING, SURVEYING, OR ENGINEERING. THIS DATA IS FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD NOT BE RELIED UPON FOR SITE-

SPECIFIC PURPOSES. THE DATA HEREIN IS SUBJECT TO CONSTANT CHANGE AND MAY NOT BE COMPLETE, ACCURATE, OR UP-TO-DATE. THE CITY OF TEMPE IN NO WAY ASSUMES LIABILITY OR RESPONSIBILITY FOR ANY INCORRECT DATA OR ANY INFORMATION PROVIDED HEREIN. CONTRACTOR ACKNOWLEDGES AND AGREES THAT THE CITY OF TEMPE ASSUMES NO LIABILITY FOR DAMAGES INCURRED DIRECTLY OR INDIRECTLY RESULTING FROM INCOMPLETE, INCORRECT, OR MISSING INFORMATION; INCLUDING ANY DIRECT, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED OR UNDER ANY THEORY OF LIABILITY, WHETHER IN TORT, CONTRACT, STRICT LIABILITY, OR OTHERWISE. **BY WAY OF THE SIGNATURE ON THIS CONTRACT, CONTRACTOR ASSUMES ALL LIABILITY FOR ANY AND ALL DEPENDENCE AND/OR RELIANCE UPON THIS INFORMATION AND ASSUMES ALL RESPONSIBILITY RELATING THERETO. ANY AND ALL EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PURPOSE ARE SPECIFICALLY AND EXPRESSLY DISCLAIMED.** CONTRACTOR SHOULD NOT RELY UPON THE GIS DATA WITHOUT PROPER FIELD VERIFICATION FOR ANY PURPOSE.

**6.24. AMENDMENT OF CONTRACT**

No supplement, modification or amendment of any term of this Contract will be deemed binding or effective unless in writing and signed by the parties hereto and in conformation with provisions of this Contract except as expressly provided herein to the contrary.

**6.25. LABOR**

Contractor agrees and covenants to use only licensed contractors and subcontractor(s) in the making and/or installation of any and all repairs, alterations, improvements, or other work of Contractor on the Project. Contractor shall be liable to City for any losses and liabilities associated with any violation of this provision, and the Contract shall immediately be terminated upon any violation by Contractor.

**6.26. NON-APPROPRIATION OF FUNDS OR NON-FUNDING**

City's performance under this Contract depends upon the appropriation of grant funds by the Federal Highway Administration. If the funds necessary for City's performance under this Contract are not appropriated or are otherwise made unavailable to the City, City may provide written notice to Contractor and cancel this Contract without further obligation of City. The parties understand and agree that funding and appropriations are beyond the control of the City.

**6.27. PUBLIC RECORDS**

The City is a public entity subject to the provisions of the Arizona Public Records Law, A.R.S. § 39-121, *et seq.* ("Law"). Some or all of the information contained within the Contract and related documents constitutes a public record that the City may be required to disclose to other persons or entities. In the event of receipt of a public records request by the City, Contractor must provide verification that its document falls under the exception to the Law in order to contest disclosure of said document. In the event of Contractor contesting disclosure, said document shall be submitted to a court of competent jurisdiction for an *in camera* review and determination, at Contractor's sole expense.

**6.28. COUNTERPARTS**

This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which when taken together shall constitute one and the same instrument, and it shall not be necessary that any single counterpart bear the signature of all parties.

**6.29. RECORD RETENTION**

Contractor agrees to retain all records relating to the Contract pursuant to A.R.S. § 35-214, as amended from time to time. Contractor agrees to make those records available at all reasonable times for inspection and audit by City during the term of the Contract and for a period of five (5) years after the completion of the Contract. The records shall be provided at City Public Works Department, Engineering Division, Tempe, Arizona, or another location designated by City upon reasonable notice to Contractor.

**6.30. DRUG-FREE WORKPLACE**

Contractor is hereby advised that the City has adopted a policy establishing a drug-free workplace for itself and as a requirement for sellers/Contractors doing business with the City to ensure the safety and health of employees working on City license agreements, contracts, and/or projects. Contractor agrees to require a drug-free workplace for all employees working under this Contract. Specifically, all employees of Contractor who are performing work under this Contract shall be notified, in writing, by Contractor that they are prohibited from the manufacture, distribution, dispensation, possession, or unlawful use of a controlled substance in the work place or work site. Any violation of this section constitutes a material breach of this Contract.

## 7. FEDERAL PROVISIONS

The FEDERAL PROVISIONS section in this Invitation for Bids / Contract has two components:

- **FORM FHWA-1273 (REV. MAY 1, 2012)** – “Required Contract Provisions: Federal-Aid Construction Contracts.” Form FHWA-1273 consists of Parts I–XI, below.

- **ADDITIONAL FEDERAL PROVISIONS (NOT PART OF FORM FHWA-1273).** The Additional Federal Provisions consist of Parts XII–XVIII, below.

### **Federal Provisions That Must Be Inserted (in Full) in Subcontracts at Every Tier –**

- (1) Form FHWA-1273 (Rev. May 1, 2012), which is Parts I–XI of these FEDERAL PROVISIONS. **Note:** The subcontractor must *initial and date* each page of Form FHWA-1273 in the subcontract.
- (2) The provisions in “Part XV. Disadvantaged Business Enterprises” of these FEDERAL PROVISIONS.
- (3) The Exhibit titled “Prompt Payment and Return of Retention Requirements.”
- (4) The Wage Determination in the EXHIBITS to this Invitation for Bids/ Contract, as modified by Addenda.

### **Federal Provisions That Must Be Inserted in Purchase Orders / Rental Agreements / Equipment Leases at Every Tier –**

- (1) A statement that expressly incorporates Form FHWA-1273 (Rev. May 1, 2012) into the purchase order / rental agreement / equipment lease, by reference. For example: “The provisions in Form FHWA-1273 (Rev. May 1, 2012) apply to this purchase order / rental agreement / equipment lease.”
  - (2) The Exhibit titled “Prompt Payment and Return of Retention Requirements.”
  - (3) The provisions in “Part XV. Disadvantaged Business Enterprises” of these FEDERAL PROVISIONS.
- 

## **7.1. FHWA Title VI Contract Language**

- 7.1.1. The City of Tempe**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252.42 U.S.C. §§ 200d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

- 7.1.2. Compliance with Regulations:** Contractor shall comply with the Regulation relative to nondiscrimination in federally-assisted programs of the Arizona Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- 7.1.3. Nondiscrimination:** Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, national origin, or sex in the selection and retention of subcontractors, including procurements of materials and leases of equipment. Contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- 7.1.4. Solicitations for Subcontractors, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by Contractor of Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, or sex.
- 7.1.5. Information and Reports:** Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the *City of Tempe*, the *Arizona Department of Transportation* or *Federal Aid Highway Program* to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the *Transportation or Federal Aid Highway Program* as appropriate, and shall set forth what efforts it has made to obtain the information.
- 7.1.6. Sanctions for Noncompliance:** In the event of Contractor's noncompliance with the nondiscrimination provisions of this contract, the *City of Tempe* shall impose such contract sanctions as it or the *Arizona Department of Transportation* or *Federal Aid Highway Program* may determine to be appropriate, including, but not limited to:
- a) withholding of payments to Contractor under the contract until Contractor complies, and/or

- b) cancellation, termination or suspension of the contract, in whole or in part.

**7.1.7. Incorporation of Provisions:** Contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

Contractor shall take such action with respect to any subcontract. or procurement as the *City of Tempe, Arizona Department of Transportation, or Federal Aid Highway Program* may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, Contractor may request the *City of Tempe* to enter into such litigation to protect the interests of the *City of Tempe*, and, in addition, Contractor may request the United States or the Arizona Department of Transportation to enter into such litigation to protect the interests of the United States or Arizona Department of Transportation.

**ADDITIONAL FEDERAL PROVISIONS (NOT PART OF FORM FHWA-1273)**

- XII. Energy Conservation**
  - XIII. Buy America**
  - XIV. Statement of No Collusion in Bidding**
  - XV. Disadvantaged Business Enterprises**
  - XVI. On-the-Job Training**
  - XVII. Changed Conditions**
  - XVIII. Access to Records; Records Retention**
  - XIX. Cargo Preference Act**
  - XX. Equal Employment Opportunity Compliance Reports**
  - XXI. Affirmative Action to Ensure Equal Employment Opportunity**
  - XXII. Standard Specifications 107.18 and 107.19**
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**XII. ENERGY CONSERVATION**

In accordance with 49 CFR 18.36(i)(13), Contractor and every Subcontractor on this Project shall comply with the mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

**XIII. BUY AMERICA**

This Project is subject to FHWA's "Buy America" regulations in 23 CFR § 635.410.

If steel or iron materials are to be permanently incorporated in this Project, all manufacturing processes for these materials, including application of a coating, must occur in the United States.



Manufacturing is any process that modifies the chemical content, physical shape or size, or final finish of a product. Manufacturing begins with the initial melting and mixing, and continues through the bending and coating stages. If a domestic product is taken out of the U.S. for any process, it becomes a foreign-source material. Coating includes all processes that protect or enhance the value of the material to which the coating is applied.

The requirements of this section do not prevent a minimal use of foreign steel and iron materials in this Project, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract cost or \$2,500, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the steel and iron products as they are delivered to the Project.

A contractor or subcontractor asserting permissible minimal use of foreign steel and iron materials must retain documentation of the quantities and costs of those materials.

All Steel and Iron products subject to Buy America shall be accompanied by a Certificate of Compliance or Certificate of Analysis. The Certificates shall comply with the requirements specified herein, the ADOT Materials Testing Manual, and applicable ADOT Materials Policy and Procedure Directives.

#### **Certificate of Compliance:**

A Certificate of Compliance shall be submitted on the manufacturer's or supplier's official letterhead, and shall contain the following information:

- (1) The current name, address, and phone number of the manufacturer or supplier of the material.
- (2) A description of the material supplied.
- (3) Quantity of material represented by the certificate.
- (4) Means of material identification, such as label, lot number, or marking.
- (5) A statement that the material complies in all respects with the requirements of the cited specifications. Certificates shall state compliance with the cited specification, such as AASHTO M 320, ASTM C 494; or specific table or subsection of the Arizona Department of Transportation Standard Specifications or Special Provisions. Certificates may cite both, if applicable.
- (6) A statement that the individual identified in item seven below has the legal authority to bind the manufacturer or the supplier of the material.
- (7) The name, title, and signature of the responsible individual. The date of the signature shall also be given.

Each of the first six items specified above shall be completed prior to the signing of the certificate as defined in item seven. No certificate will be accepted that has been altered, added to, or changed in any way after the authorized signature has been affixed to the original certificate. However, notations of a clarifying nature, such as project number, contractor, or quantity shipped are acceptable, provided the basic requirements of the certificate are not affected.

A copy or facsimile reproduction of the original certificate will be acceptable; however, the original certificate shall be made available upon request.

**Certificate of Analysis:**

A Certificate of Analysis shall include all the information required for a Certificate of Compliance and, in addition, shall include the results of all tests required by the specifications.

**XIV. STATEMENT OF NO COLLUSION IN BIDDING**

**Every bidder must submit the form titled “AFFIDAVIT OF NO COLLUSION IN BIDDING” with its bid.** The affidavit form is in the Exhibits section.

In accordance with 23 CFR § 635.112(f), a bidder for this Project must submit, with its bid, a sworn statement that no one associated with the bidder has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the Project.

**XV. DISADVANTAGED BUSINESS ENTERPRISES**

**1.0 Policy:**

The Arizona Department of Transportation (hereinafter the Department) has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the U.S. Department of Transportation (USDOT), 49 CFR Part 26. The Department has received Federal financial assistance from the U.S. Department of Transportation and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26.

It is the policy of the Department to ensure that DBEs, as defined in Part 26, have an equal opportunity to receive and participate in USDOT-assisted contracts. It is also the policy of the Department:

1. To ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
2. To create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;
3. To ensure that the DBE program is narrowly tailored in accordance with applicable law;
4. To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are counted as DBEs;
5. To help remove barriers to the participation of DBEs in USDOT-assisted contracts;
6. To assist in the development of firms that can compete successfully in the market place outside the DBE program and;
7. To promote the use of DBEs in all types of federally-assisted contracts and procurement activities.

It is also the policy of the Department to facilitate and encourage participation of Small Business Concerns (SBCs), as defined herein in USDOT-assisted contracts. The Department encourages contractors to take reasonable steps to eliminate obstacles to SBCs' participation and to utilize SBCs in performing contracts.

Local Public Agencies (LPA) and or Subrecipients of Federal financial assistance have adopted ADOT's DBE Program Plan, adhere to the Department's DBE policy and will administer and manage the contracts from advertising, consultant selection, negotiation, contract execution, processing payment reports and contract modifications, audits, DBE compliance (e.g., reporting and monitoring) through contract closeout.

## **2.0 Assurances of Non-Discrimination:**

The contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the LPA/Subrecipient, with the Department's concurrence, deems appropriate, which may include, but not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

The contractor, subrecipient, or subcontractor shall ensure that all subcontract agreements contain this non-discrimination assurance.

## **3.0 Definitions:**

**(A) Commercially Useful Function (CUF):** Commercially Useful Function is defined fully in 49 CFR 26.55 which definition is incorporated herein by reference.

**(B) Disadvantaged Business Enterprise (DBE):** a for-profit small business concern which meets both of the following requirements:

- (1) Is at least 51 percent owned by one or more socially and economically disadvantaged individuals or, in the case of any publicly owned business, at least 51 percent of the stock is owned by one or more such individuals; and,
- (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

**(C) Joint Check:** a two-party check between a subcontractor, DBE and/or non-DBE, a prime contractor and the regular dealer of material supplies.

- (D) **Joint Venture:** an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.
- (E) **NAICS Code:** The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.
- (F) **Non-DBE:** any firm that is not a DBE.
- (G) **Small Business Concern:** a business that meets all of the following conditions:
- (1) Operates as a for-profit business;
  - (2) Operates a place of business primarily within the U.S., or makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials, or labor;
  - (3) Is independently owned and operated;
  - (4) Is not dominant in its field on a national basis; and
  - (5) Does not have annual gross receipts that exceed the Small Business Administration size standards average annual income criteria for its primary North American Industry Classification System (NAICS) code.
- (H) **Socially and Economically Disadvantaged Individuals:** any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is:
- (1) Any individual who is found to be a socially and economically disadvantaged individual on a case-by-case basis.
  - (2) Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
    - (i) "Black Americans," which includes persons having origins in any of the Black racial groups of Africa;
    - (ii) "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;

- (iii) "Native Americans," which includes persons who are enrolled members of a federally or State recognized Indian tribe, Alaskan Natives or Native Hawaiians;
- (iv) "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Republic of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong;
- (v) "Subcontinent Asian Americans," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (vi) Women;
- (vii) Any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration (SBA), at such time as the SBA designation becomes effective.

#### **4.0 Working with DBEs:**

The Department works with DBEs and assists them in their efforts to participate in the highway construction program. All bidders should contact the Department's Business Engagement and Compliance Office (BECO) by phone, through email, or at the address shown below, for assistance in their efforts to use DBEs in the highway construction program of the Department. BECO contact information is as follows:

Arizona Department of Transportation  
Business Engagement and Compliance Office  
1801 W. Jefferson Street, Room 101, Mail Drop 154A  
Phoenix, AZ 85007  
Phone (602) 712-7761  
FAX (602) 712-8429  
Email: [contractorcompliance@azdot.gov](mailto:contractorcompliance@azdot.gov)  
Website: [www.azdot.gov/bec](http://www.azdot.gov/bec)

#### **4.01 Mentor-Protégé Program:**

ADOT has established a Mentor-Protégé program as an initiative to encourage and develop disadvantaged businesses in the highway construction industry. The program encourages prime contractors to provide certain types of assistance to certified DBE subcontractors. ADOT encourages contractors and certified DBE subcontractors to engage in a Mentor-Protégé agreement under certain conditions. Such an agreement must be mutually beneficial to both parties and to ADOT in fulfilling the requirements of 49 CFR Part 23. For guidance regarding this program, refer to the Mentor-Protégé Program Guidelines available on the BECO website.

The Mentor-Protégé program is intended to increase legitimate DBE activities. But the program does not diminish the DBE rules or regulations, and participants may not circumvent these rules.

## **5.0 Applicability:**

ADOT has established an overall annual goal for DBE participation on Federal-aid contracts. ADOT intends for the goal to be met with a combination of race conscious and race neutral efforts. Race conscious participation occurs where the contractor uses a percentage of DBEs, as defined herein, to meet the contract-specified goal. Race neutral efforts are those that are, or can be, used to assist all small businesses or increase opportunities for all small businesses. The regulation, 49 CFR 26, describes race neutral participation as when a DBE wins a prime contract through customary competitive procurement procedures or is awarded a subcontract on a prime contract that does not carry a DBE contract goal.

The DBE provisions are applicable to all bidders including DBE bidders.

## **6.0 Certification and Registration:**

### **6.01 DBE Certification:**

Certification as a DBE shall be predicated on:

- (1) The completion and execution of an application for certification as a "Disadvantaged Business Enterprise".
- (2) The submission of documents pertaining to the firm(s) as stated in the application(s), including but not limited to a statement of social disadvantage and a personal financial statement.
- (3) The submission of any additional information which the Department may require to determine the firm's eligibility to participate in the DBE program.
- (4) The information obtained during the on-site visits to the offices of the firm and to active job-sites.

Applications for certification may be filed online with the Department or one of its Unified Certification Program (UCP) partner agencies at any time through the Arizona Unified Transportation Registration and Certification System (AZ UTRACS) website at <http://www.azutracs.com>.

DBE firms and firms seeking DBE certification shall cooperate fully with requests for information relevant to the certification process. Failure or refusal to provide such information is a ground for denial or removal of certification.

ADOT is a member of the AZ Unified Certification Program (AZUCP). Only DBE firms that are certified by the AZUCP are eligible for credit on ADOT projects. A list of DBE firms certified by

AZUCP is available on the internet at <http://www.azutracs.com/>. The list will indicate contact information and specialty for each DBE firm, and may be sorted in a variety of ways. However, ADOT does not guarantee the accuracy and/or completeness of this information, nor does ADOT represent that any licenses or registrations are appropriate for the work to be done.

The Department's certification of a DBE is not a representation of qualifications and/or abilities; only that the firm has met the criteria for DBE certification as outlined in 49 CFR Part 26. The contractor bears all risks of ensuring that DBE firms selected by the contractor are able to perform the work.

## **6.02 SBC Registration:**

To comply with 49 CFR Part 26.39, ADOT's DBE Program incorporates contracting requirements to facilitate participation by Small Business Concerns (SBCs) in federally assisted contracts. SBCs are for-profit businesses authorized to do business in Arizona that meet the Small Business Administration (SBA) size standards for average annual revenue criteria for its primary North American Industry Classification System (NAICS) code.

While the SBC component of the DBE program does not require utilization goals on projects, the Department and the LPA/Subrecipient encourages contractors to utilize small businesses that are registered in AZ UTRACS on their contracts, in addition to DBEs meeting the certification requirement. The contractor may use the AZ UTRACS website to search for certified DBEs and registered SBCs that can be used on the contract. However, SBCs that are not DBEs will not be counted toward the DBE participation.

SBCs can register online at the AZ UTRACS website. The registration of SBCs is not a representation of qualifications and/or abilities. The contractor bears all risks of ensuring that SBC firms selected by the contractor are able to perform the work.

## **7.0 DBE Financial Institutions:**

ADOT thoroughly investigates the full extent of services offered by financial institutions owned and controlled by socially and economically disadvantaged individuals in its service area and makes reasonable efforts to use these institutions. ADOT encourages prime contractors to use such institutions on USDOT assisted contracts. However, use of DBE financial institutions will not be counted toward the DBE participation.

ADOT and the LPA/Subrecipient encourages prime contractors to research the Federal Reserve Board website at [www.federalreserve.gov](http://www.federalreserve.gov) to identify minority-owned banks in Arizona derived from the Consolidated Reports of Condition and Income filed quarterly by banks (FFIEC 031 and 041) and from other information on the Board's National Information Center database.

## **8.0 Time is of the Essence:**

TIME IS OF THE ESSENCE IN RESPECT TO THE DBE PROVISIONS.

### **9.0 Computation of Time:**

In computing any period of time described in this DBE special provision, such as calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday. In circumstances where the LPA/Subrecipient Procurement Office is closed for all or part of the last day, the period extends to the next day on which the LPA/Subrecipient Procurement Office is open.

### **10.0 Contractor and Subcontractor Requirements:**

#### **10.01 General:**

The contractor shall establish a DBE program that will ensure nondiscrimination in the award and administration of contracts and subcontracts.

Agreements between the bidder and a DBE in which the DBE promises not to provide subcontracting quotations to other bidders are prohibited.

#### **10.02 DBE Liaison:**

The contractor shall designate a DBE Liaison responsible for the administration of the contractor's DBE program. The name of the designated DBE Liaison shall be included in the DBE Intended Participation Affidavit Summary.

### **11.0 Bidders/Proposers List and AZ UTRACS Registration Requirement:**

Under Title 49 CFR of the Code of Federal Regulations, Part 26.11, DOTs are required to collect certain information from all contractors and subcontractors who seek to work on federally-assisted contracts in order to set overall and contract DBE goals. ADOT collects this information through a Bidders/Proposers List when firms register their companies on the Arizona Unified Transportation Registration and Certification System (AZ UTRACS) web portal at <http://www.azutracs.com/> a centralized database for companies that seek to do business with ADOT and the LPA/Subrecipient. This information will be maintained as confidential to the extent allowed by federal and state law.

Prime contractors and all subcontractors, including DBEs, must be registered in AZ UTRACS. Bidders may verify that their firm and each subcontractors is registered using the AZ UTRACS website.

Bidders may obtain additional information at the AZ UTRACS website or by contacting the LPA/Subrecipient.

Bidders shall create the Bidders/Proposers List in the AZ UTRACS by selecting all subcontractors, service providers, manufacturers and suppliers that expressed interest or submitted bids, proposals or quotes for this contract. The Bidders/Proposers List form must be complete and must include the names for all subcontractors, service providers, manufacturers and suppliers regardless of the bidders' intentions to use those firms on the project.



All bidders must complete the Bidders/Proposers List online at AZ UTRACS whether they are the apparent low bidder or not. A confirmation email will be generated by the system. The bidders shall submit to the LPA/Subrecipient a copy of the email confirmation no later than 4:00 p.m. on the fifth calendar day following the bid opening. Faxed copies are acceptable.

FAILURE TO SUBMIT THE REQUIRED BIDDERS/PROPOSERS LIST TO THE LPA/SUBRECIPIENT PROCUREMENT OFFICE BY THE STATED TIME AND IN THE MANNER HEREIN SPECIFIED SHALL BE CAUSE FOR THE BIDDER BEING DEEMED INELIGIBLE FOR AWARD OF THE CONTRACT.

## **12.0 DBE Goals:**

The Department has not established contract goals for DBE participation in this contract. Contractors are still encouraged to employ reasonable means to obtain DBE participation. Contractors must retain records in accordance with these DBE specifications. The contractor is notified that this record keeping is important to the Department so that it can track DBE participation where only race neutral efforts are employed.

## **13.0 Payment Reporting:**

The contractor shall report on a monthly basis indicating the amounts paid to all subcontractors, of all tiers, working on the project. Reporting shall be in accordance with Prompt Pay and Payment Reporting requirements section 8.10 of the contract specifications.

## **14.0 Crediting DBE Participation:**

### **14.01 General Requirements:**

To count toward DBE participation, the DBE firm must be certified in each NAICS code applicable to the kind of work the firm will perform on the contract. NAICS for each DBE can be found on the AZ UTRACS under the Firm Directory. General descriptions of all NAICS codes can be found at [www.naics.com](http://www.naics.com).

The entire amount of a contract that is performed by the DBE's own forces, including the cost of supplies and materials purchased by the DBE for the work on the contract and equipment leased by the DBE will be credited toward DBE participation. Supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate will not be credited toward DBE participation.

The contractor bears the responsibility to determine whether the DBE possesses the proper contractor's license(s) to perform the work.

The Department's certification is not a representation of a DBE's qualifications and/or abilities. The contractor bears all risks that the DBE may not be able to perform its work for any reason.

A DBE may participate as a prime contractor, subcontractor, joint venture partner with either a prime contractor or a subcontractor, or as a vendor of materials or supplies. A DBE joint venture

partner shall be responsible for a clearly defined portion of the work to be performed, in addition to meeting the requirements for ownership and control.

The dollar amount of work to be accomplished by DBEs, including partial amount of a lump sum or other similar item, shall be on the basis of subcontract, purchase order, hourly rate, rate per ton, etc., as agreed to between parties.

With the exception of bond premiums, all work must be attributed to specific bid items. Where work applies to several items, the DBE contracting arrangement must specify unit price and amount attributable to each bid item. DBE credit for any individual item of work performed by the DBE shall be the lesser of the amount to be paid to the DBE or the prime contractor's bid price. If the amount bid by the DBE on any item exceeds the prime contractor's bid amount, the prime contractor may not obtain credit by attributing the excess to other items.

Where more than one DBE is engaged to perform parts of an item (for example, supply and installation), the total amount payable to the DBEs will not be considered in excess of the prime contractor's bid amount for that item.

Bond premiums may be stated separately, so long as the arrangement between the prime contractor and the DBE provides for separate payment not to exceed the price charged by the bonding company.

DBE credit may be obtained only for specific work done for the project, supply of equipment specifically for physical work on the project, or supply of materials to be incorporated in the work. DBE credit will not be allowed for costs such as overhead items, capital expenditures (for example, purchase of equipment), and office items.

If a DBE performs part of an item (for example, installation of materials purchased by a Non-DBE), the DBE credit shall not exceed the lesser of (1) the DBE's contract or (2) the prime contractor's bid for the item, less a reasonable deduction for the portion performed by the Non-DBE.

When a DBE performs as a partner in a joint venture, only that portion of the total dollar value of the contract which is clearly and distinctly performed by the DBE's own forces can be credited.

The contractor may credit second-tier subcontracts issued to DBEs by non-DBE subcontractors. Any second-tier subcontract to a DBE must meet the requirements of a first-tier DBE subcontract.

A prime contractor may credit the entire amount of that portion of a construction contract that is performed by the DBE's own forces. The cost of supplies and materials obtained by the DBE for the work of the contract can be included so long as that cost is reasonable. Leased equipment may also be included. No credit is permitted for supplies purchased or equipment leased from the prime contractor or its affiliate(s).

When a DBE subcontracts a part of the work of its contract to another firm, the value of the subcontract may be credited towards DBE participation only if the DBE's subcontractor is itself

a DBE and performs the work with its own forces. Work that a DBE subcontracts to a non-DBE firm does not count towards DBE participation.

A prime contractor may credit the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a USDOT-assisted contract, provided the fees are reasonable and not excessive as compared with fees customarily allowed for similar services.

#### **14.02 Effect of Loss of DBE Eligibility:**

If a DBE is deemed ineligible (decertified) or suspended by the Department in accordance with 49 CFR 26.87 and 26.88, the DBE may not be considered to count toward DBE participation on a new contract, but may be considered to count toward DBE participation under a subcontract that was executed before the DBE suspension or decertification is effective.

When a DBE firm or a DBE prime contractor loses its DBE eligibility and a subcontract or contract has not been executed before a decertification notice is issued to the DBE firm by its certifying agency, the ineligible firm does not count toward DBE participation. When a subcontract is executed with the DBE firm before the Department notified the firm of its ineligibility, the contractor may continue to receive DBE participation credit for the firm's work on the contract.

#### **14.03 Notifying the Contractor of DBE Certification Status:**

Each DBE contract of any tier shall require any DBE subcontractor or supplier that is either decertified or certified during the term of the contract to immediately notify the contractor and all parties to the DBE contract in writing, with the date of decertification or certification. The contractor shall require that this provision be incorporated in any contract of any tier in which a DBE is a participant.

#### **14.04 Police Officers:**

DBE credit will not be permitted for procuring DPS officers. For projects on which officers from other agencies are supplied, DBE credit will be given only for the broker fees charged, and will not include amounts paid to the officers. The broker fees must be reasonable.

#### **14.05 Commercially Useful Function:**

A prime contractor can credit expenditures to a DBE subcontractor only if the DBE performs a Commercially Useful Function (CUF).

A DBE performs a CUF when it is responsible for execution of the work of a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself that it uses on the project. To determine whether a DBE is performing a commercially useful function,

the LPA/Subrecipient will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

A DBE will not be considered to perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, the LPA/Subrecipient will examine similar transactions, particularly those in which DBEs do not participate.

If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the LPA/Subrecipient will presume that the DBE is not performing a commercially useful function.

When a DBE is presumed not to be performing a commercially useful function as provided above, the DBE may present evidence to rebut this presumption. The LPA/Subrecipient will determine if the firm is performing a CUF given the type of work involved and normal industry practices.

The LPA/Subrecipient will notify the contractor, in writing, if it determines that the contractor's DBE subcontractor is not performing a CUF. The contractor will be notified within seven calendar days of the LPA/Subrecipient's decision.

Decisions on CUF may be appealed to the ADOT BECO. The appeal must be in writing and personally delivered or sent by certified mail, return receipt requested, to the ADOT BECO. The appeal must be received by the ADOT BECO no later than seven calendar days after the decision of LPA/Subrecipient. LPA/Subrecipient decision remains in effect unless and until ADOT BECO reverses or modifies LPA/Subrecipient decision. ADOT BECO will promptly consider any appeals under this subsection and notify the contractor of the ADOT BECO findings and decisions. Decisions on CUF matters are not administratively appealable to USDOT.

The LPA/Subrecipient will conduct project site visits on the contract to confirm that DBEs are performing a CUF. The contractor shall cooperate during the site visits and the LPA/Subrecipient staff will make every effort not to disrupt work on the project.

#### **14.06 Trucking:**

LPA/Subrecipient will use the following factors in determining whether a DBE trucking company is performing a commercially useful function. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract.

The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract on every day that credit is to be given for trucking.

The contractor will receive credit for the total value of transportation services provided by the DBE using trucks it owns, insures and operates, and using drivers it employs.

The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services.

The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks with drivers from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE leased trucks with drivers not to exceed the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks with drivers receives credit only for the fee or commission paid to the DBE as a result of the lease agreement.

Example: DBE Firm X uses two of its own trucks on a contract. It leases two trucks from DBE Firm Y and six trucks from non-DBE firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight trucks. DBE credit could be awarded only for the fees or commissions pertaining to the remaining trucks Firm X receives as a result of the lease with Firm Z.

The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

Example: DBE Firm X uses two of its own trucks on a contract. It leases three additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all five trucks.

For purposes of this section, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE. Credit will be allowed only for those lease costs related to the time each truck is devoted to the project.

DBE credit for supplying paving grade asphalt and other asphalt products will only be permitted for standard industry hauling costs, and only if the DBE is owner or lessee of the equipment and trucks. Leases for trucks must be long term (extending for a fixed time period and not related to time for contract performance) and must include all attendant responsibilities such as insurance, titling, hazardous waste requirements, and payment of drivers.

#### **14.07 Materials and Supplies:**

LPA/Subrecipient will credit expenditures with DBEs for material and supplies as follows. If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies is credited. A manufacturer is defined as a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract, and of the general character described by the specifications.

If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies is credited. A DBE regular dealer is defined as a firm that owns, operates, or maintains a store or warehouse or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A firm may be a DBE regular dealer in such bulk items as petroleum products, steel, cement, stone or asphalt without owning, operating, or maintaining a place of business, as provided above, if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement, and not on an ad-hoc or contract-by-contract basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph and the paragraph above.

With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, the LPA/Subrecipient will credit the entire amount of the fees or commissions charged by the DBE for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE participation, provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services. The cost of the materials and supplies themselves may not be counted toward the DBE participation.

The LPA/Subrecipient will credit expenditures with DBEs for material and supplies (e.g. whether a firm is acting as a regular dealer or a transaction expeditor) towards the DBE participation on a contract-by-contract basis. The fact that a DBE firm qualifies under a classification (manufacturer, regular dealer or supplier) for one contract does not mean it will qualify for the same classification on another contract. The bidder shall be responsible for verifying whether a DBE qualifies as a DBE manufacturer, regular dealer or supplier. The bidder may contact the LPA/Subrecipient for assistance in this determination.

#### **15.0 Joint Checks:**

##### **15.01 Requirements:**

A DBE subcontractor and a material supplier (or equipment supplier) may request permission for the use of joint checks for payments from the prime contractor to the DBE subcontractor and the supplier. Joint checks may be issued only if all the conditions in this subsection are met.

1. The DBE subcontractor must be independent from the prime contractor and the supplier, and must perform a commercially useful function. The DBE subcontractor must be responsible for negotiating the price of the material, determining quality and quantity, ordering the materials, installing (where applicable), and paying for the material. The DBE subcontractor may not be utilized as an extra participant in a transaction, contract, or project in order to obtain the appearance of DBE participation.
2. The use of joint checks will be allowed only if the prime contractor, DBE subcontractor, and material supplier establish that the use of joint checks in similar transactions is a commonly recognized business practice in the industry, particularly with respect to similar transactions in which DBE's do not participate.
3. A material or supply contract may not bear an excessive ratio relative to the DBE subcontractor's normal capacity.
4. There may not be any exclusive arrangement between one prime and one DBE in the use of joint checks that may bring into question whether the DBE is independent of the prime contractor.
5. Any arrangement for joint checks must be in writing, and for a specific term (for example, one year, or a specified number of months) that does not exceed a reasonable time to establish a suitable credit line with the supplier.
6. The prime contractor may act solely as the payer of the joint check, and may not have responsibility for establishing the terms of the agreement between the DBE subcontractor and the supplier.
7. The DBE must be responsible for receiving the check from the prime contractor and delivering the check to the supplier.
8. The prime contractor cannot require the DBE subcontractor to use a specific supplier, and the prime contractor may not participate in the negotiation of unit prices between the DBE subcontractor and the supplier.

#### **15.02 Procedure and Compliance:**

1. BECO must approve the agreement for the use of joint checks in writing before any joint checks are issued. The prime contractor shall submit a DBE joint check request form, available from the BECO website, along with the joint check agreement, to LPA/Subrecipient and BECO through email within seven calendar days from the time the subcontract is executed.

2. After obtaining authorization from BECO for the use of joint checks, the prime contractor, the DBE, and the supplier must retain documentation to allow for efficient monitoring of the agreement by the LPA/Subrecipient.
3. Copies of canceled checks must be submitted, with the payment information for the period in which the joint check was issued, electronically through email to LPA/Subrecipient Procurement Office and made available for review at the time of the onsite CUF review. The prime contractor, DBE, and supplier each have an independent duty to report to the LPA/Subrecipient in the case of any change from the approved joint check arrangement.
4. Any failure to comply will be considered by the LPA/Subrecipient, with ADOT concurrence to be a material breach of this contract and will subject the prime contractor, DBE, and supplier to contract remedies and, in the case of serious violations, a potential for termination of the contract, or other remedies which may prevent future participation by the offending party.

#### **16.0 Certification of Final DBE Payments:**

DBE participation on the contract is measured by actual payments made to the DBEs. The contractor shall submit the "Certification of Final DBE Payments" form for each DBE firm working on the contract. This form shall be signed by the contractor and the relevant DBE, and submitted to the LPA/Subrecipient no later than 30 days after the DBE completes its work.

The contractor will not be released from the obligations of the contract until the "Certification of Final DBE Payments" forms are received and deemed acceptable by the LPA/Subrecipient.

#### **17.0 False, Fraudulent, or Dishonest Conduct:**

In addition to any other remedies or actions, the Department will bring to the attention of the US Department of Transportation any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take steps such as referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General for possible initiation of suspension and debarment proceedings against the offending parties or application of "Program Fraud and Civil Penalties" rules provided in 49 CFR Part 31.

#### **XVI. ON THE JOB TRAINING**

Contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

**The required number of training hours shall be 500 hours.** The Contractor shall make every possible effort to provide additional trainees with training and shall see that all trainees are afforded every opportunity to participate in as much training as is practically possible to provide. Due to turnover and attrition of trainees in any one trainee slot, it is expected that continuous trainee replacements may be necessary during the contract work period.



In the event that a contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. Contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, Contractor shall submit to the Highways Division for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, Contractor shall specify the starting time for training in each of the classifications. Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. Contractor shall satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, Contractor's records shall document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by Contractor and approved by the Highways Division and the Federal Highway Administration. The Highways Division and the Federal Highway Administration will approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, Apprenticeship programs registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Bureau of Apprenticeship and Training will also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Specifically, union apprenticeship programs and Associated Builders and Contractor's apprenticeship programs may be used. Additionally, in-house training programs may be approved on a case-by-case basis. Approval or acceptance of a training program shall be obtained from the Highways Division prior to commencing work on the

classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training may be permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Acceptance of training in such lower level management positions shall be on a case-by-case basis, and approval shall be obtained from the Highways Division prior to commencing work. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Federal Highway Administration. Some off site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit Contractor from receiving other reimbursement. Reimbursement for off site training indicated above may only be made to Contractor where he contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the off site training period.

No payment will be made to Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by Contractor and evidences a lack of good faith on the part of Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. However, when such training opportunities are suspended or interrupted under the contract which the trainee was designated, Contractor may continue training under other ADOT contracts regardless of their funding, except that no reimbursement for such training shall be made on non-federal aid contracts, under this training special provision. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent of the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program will apply to all trainees being trained for the same classification who are covered by this Training Special Provision. Contractor shall furnish the trainee a copy of the program he will follow in providing the training.

Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

Contractor shall provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Contractor shall submit a weekly training report to the Engineer. The report shall be prepared on forms obtained from the Civil Rights Office, 1135 N. 22nd Avenue (second floor), mail drop 154A, Phoenix, Arizona 85009, phone (602) 712-7761.

At the preconstruction conference, Contractor shall submit a schedule which will indicate each trainee's name, sex, race/ethnicity, the program in which the trainee is enrolled, the approximate number of hours each trainee will be trained in each phase of the work, the crafts to which the trainees belong and the estimated period of time that they will be employed as trainees. A supplemental schedule shall be submitted to the Engineer when a revision in the original schedule is necessary. At the time each trainee is scheduled to begin work, the contractor shall submit to the Engineer each trainee's name, sex, and race/ethnicity. Contractor must also submit proof that the trainee is enrolled in an approved training program.

At the conclusion of the project or at the end of each calendar year for multi-year projects, Contractor must submit to the Affirmative Action Office and to the project office, the same information described hereinbefore for each trainee that worked on the project. Additionally, Contractor must indicate if the trainee graduated from the program, was terminated due to cause, or was transferred to another project to continue his/her training.

If, at the preconstruction conference, Contractor does not provide a schedule containing the specified information, the Engineer will notify Contractor of the infraction. Failure to provide the schedule within 15 calendar days from the date of notification shall be considered as willful non-compliance. The Engineer will cause to be withheld from Contractor's monthly payments additional retainage in the amounts specified below. The amount withheld from the monthly payment shall be held until an acceptable schedule or supplemental schedule has been submitted.

The Engineer will monitor the use of trainees based on Contractor's schedule, supplemental schedules, and weekly training report. If the use of trainees is not in conformance with the schedule or supplemental information, the Engineer will cause to be withheld from Contractor's monthly payments additional retainage in the amounts specified below. Conformance with the schedule will be considered acceptable when the cumulative number of trainee hours earned to date under the Item 9230001 - PROVIDE ON-THE-JOB TRAINING is at least 90 percent of that shown on the schedule, for the work performed to date.

Additional Retainage

First and Second monthly payments following infraction	\$1,000.00 each month
Third monthly payment and thereafter	\$5,000.00 each month

The amount withheld from the monthly payment shall be held until an acceptable schedule or supplemental schedule has been submitted and until conformance with the schedule has been determined.

If, at the completion of the contract, the Department is holding additional retainage in accordance with this specification, the retainage will become the property of the Department, not as penalty but as liquidated damages.

## **XVII. CHANGED CONDITIONS**

In accordance with 23 CFR § 635.109(a), the following provisions apply to this Project.

### **(1) Differing Site Conditions**

(i) During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.

(ii) Upon written notification, the Tempe construction project manager will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The Tempe construction project manager will notify Contractor of the determination whether or not an adjustment of the contract is warranted.

(iii) No contract adjustment which results in a benefit to Contractor will be allowed unless Contractor has provided the required written notice.

(iv) No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

### **(2) Suspensions of Work Ordered by the Tempe Project Manager**

(i) If the performance of all or any portion of the work is suspended or delayed by the Tempe construction project manager in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and Contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, Contractor shall submit to the Tempe construction project manager in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

(ii) Upon receipt, the Tempe construction project manager will evaluate Contractor's request. If the Tempe construction project manager agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Tempe construction project manager will make an adjustment (excluding profit) and modify the contract in

writing accordingly. Contractor will be notified of the Tempe Project Manager's determination whether or not an adjustment of the contract is warranted.

(iii) No contract adjustment will be allowed unless Contractor has submitted the request for adjustment within the time prescribed.

(iv) No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

### **(3) Significant Changes in the Character of Work**

(i) The Tempe construction project manager reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project.

Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and Contractor agrees to perform the work as altered.

(ii) If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against Contractor in such amount as the Tempe construction project manager may determine to be fair and equitable.

(iii) If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.

(iv) The term "significant change" shall be construed to apply only to the following circumstances:

(A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or

(B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

## **XVIII. ACCESS TO RECORDS; RECORDS RETENTION**

In accordance with 49 CFR 18.36(i)(10), Contractor and every Subcontractor on this Project shall provide access to the City of Tempe, the Arizona Department of Transportation, the Federal Highway Administration, the Comptroller General of the United States, or any of their duly authorized representatives, to any of Contractor's or Subcontractor's books, documents, papers, and records that are directly pertinent to the Contract for this Project, for the purposes of making audit, examination, excerpts, and transcriptions.

In accordance with 49 CFR 18.36(i)(11), Contractor and every Subcontractor on this Project shall maintain all required records for a minimum of three years, after the grant has been formally closed; i.e., after the City of Tempe makes final payments and all other pending matters on this Project are closed.

## **XIX. CARGO PREFERENCE ACT**

The Federal Highway Administration (FHWA) in partnership with the Federal Maritime Administration has mandated the implementation of 46 CFR 381 making the requirements of the Cargo Preference Act (CPA) applicable to the Federal Aid Highway Program.

The requirements apply to items transported by ocean vessel.

The requirements of 46 CFR 381 apply to materials or equipment acquired for a specific federal-aid highway project. In general, the requirements are not applicable to goods or materials that come from inventories independent of FHWA-funded contracts.

### **Contract Requirements**

Contractor shall comply with the requirements of the Cargo Preference Act 46 CFR 381.7(a)-(b). By executing a construction contract for this project, Contractor agrees:

- (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in the paragraph above to both the Engineer and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

## **XX. Equal Employment Opportunity Compliance Reports**

For each contract in the amount of \$10,000 or more, and for each subcontract regardless of tier not including material suppliers, in the amount of \$10,000 or more, Contractor and each subcontractor regardless of tier shall submit an annual Equal Employment Opportunity (EEO) Report containing all the information required on Form FHWA-1391

The Staffing figures to be reported should represent the project workforce on board in all or any part of the last payroll period preceding the end of July.

The report shall be submitted no later than September 1 to the City of Tempe's compliance officer.

## **XXI. Affirmative Action to Ensure Equal Employment Opportunity**

1. The bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

	Minority	Female
Tucson and balance of Pima County	24.1	6.9
Cochise, Graham, Greenlee, And Santa Cruz Counties	27.0	6.9
Phoenix and balance of Maricopa County	15.8	6.9
Apache, Coconino, gila, Mohave, Navajo, Pinal, Yavapai and Yuma Counties	19.6	6.9

These goals are applicable to all Contractor's construction work (whether or not it is Federal or federally assisted) performed in all areas where he has Federal or federally assisted work.

Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

## **XXII. Standard Specifications 107.18 and 107.19**

### **107.18 Contractor and Subcontractor Records:**

The contractor, subcontractors and all suppliers shall keep and maintain all books, papers, records, files, accounts, reports, bid documents with backup data, including electronic data, and all other material relating to the contract and project for five years following completion and acceptance of the work.

All of the above material shall be made available to the City of Tempe for auditing, inspection and copying and shall be produced, upon request; at the City offices located 31 E. 5<sup>th</sup> St., Tempe, AZ 85281.

The contractor shall insert the above requirement in each subcontract, purchase order and lease agreement and shall also include in all subcontracts a clause requiring subcontractors to include the above requirement in any lower- tier subcontract , purchase order or lease agreement.

### **107.19 Federal Immigration and Nationality Act:**

**(A) General:** The contractor, including all subcontractors, shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the contract during the duration of the contract. The State shall retain the right to perform random audits of contractor and subcontractor records or to inspect papers of any employee thereof to ensure compliance.

**(B) Compliance Requirements:** By submission of a bid, the contractor warrants that the contractor and all proposed subcontractors are and shall remain in compliance with all federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract. The State may, at its sole discretion, require evidence of compliance from the contractor or subcontractor. Should the State request evidence of compliance, the contractor or subcontractor shall have ten working days from receipt of the request to supply adequate information.

The Department will accept, as evidence of compliance, a showing by the contractor or subcontractor that it has followed the employment verification provisions of the Federal Immigration and Nationality Act as set forth in Sections 274A and 274B of that Act, including implementation of regulations and agreements between the Department of Homeland Security and the Social Security Administration's verification service.

**The contractor shall include the provisions of Subsection 107.19 in all its subcontracts.**

**(C) Sanctions for Non Compliance:** Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. The Department will reduce the contractor's compensation by \$10,000 for the initial instance of non-compliance by the contractor or a subcontractor. Should the same contractor or subcontractor commit subsequent violations within a two-year time period from the initial violation, the contractor's compensation



will be reduced by \$50,000 for each violation. The third instance by the same contractor or subcontractor within a two-year period may result , in addition to the \$50,000 reduction in compensation, in removal of the offending contractor or subcontractor, suspension of work in whole or in part or, in the case of a third violation by the contractor, termination of the contract for default . In addition, the Department may debar a contractor or subcontractor who has committed three violations within a two-year period for up to one year. For purposes of this paragraph, a violation by a subcontractor does not count as a violation by the contractor. Any delay resulting from a sanction under this subsection is a non-excusable delay. The contractor is not entitled to any compensation or extension of time for any delays or additional costs resulting from a sanction under this subsection.

## **8. EXHIBITS**

The parties agree that all references to this Contract include all exhibits designated in and attached to this Contract, such exhibits being incorporated into and made an integral part of this Contract for all purposes.

- 8.1. BIDDER'S CHECK SHEET**
- 8.2. COMPETITIVE SEALED BID FORMS**
- 8.3. BIDDER'S PROJECT REFERENCES**
- 8.4. BIDDER'S LIST OF PROPOSED SUBCONTRACTORS**
- 8.5. COMPETITIVE SEALED BID CERTIFICATION FORM**
- 8.6. CERTIFICATION BY CONTRACTOR AUTHORIZING  
EMPLOYEES TO SIGN BINDING AGREEMENTS**
- 8.7. PERFORMANCE BOND FORM**
- 8.8. PAYMENT BOND FORM**
- 8.9. UNCONDITIONAL WAIVER AND RELEASE FOR CONTRACTOR'S  
PAYMENT AND SETTLEMENT OF CLAIMS**
- 8.10. PROMPT PAYMENT AND RETURN OF RETENTION REQUIREMENTS**
- 8.11. AFFIDAVIT DEMONSTRATING LAWFUL PRESENCE IN THE UNITED  
STATES**
- 8.12. AFFIDAVIT OF NO COLLUSION IN BIDDING**
- 8.13. AFFIDAVIT OF COMPLIANCE WITH TEMPE CITY CODE  
ON ANTIDISCRIMINATION**
- 8.14. ACKNOWLEDGEMENT REGARDING LETTER IN GOOD STANDING**
- 8.15. FHWA 1273**
- 8.16. TITLE VI ASSURANCE – APPENDIX A**
- 8.17. TITLE VI ASSURANCE – APPENDIX E**
- 8.18. STANDARD FEDERAL EEO, EXECUTIVE ORDER 11246**
- 8.19. CERTIFICATION, CONTRACTS, OR SUBCONTRACTS SUBJECT TO  
THE EEO CLAUSE**
- 8.20. CERTIFICATION OF PAYMENTS**
- 8.21. LABOR STANDARDS CERTIFICATION FORM**
- 8.22. WAGE DETERMINATION**

[CONTRACT SIGNATURE PAGE FOLLOWS THIS LIST OF EXHIBITS]

**CONTRACT SIGNATURE PAGE**

**IN WITNESS WHEREOF**, this Contract has been duly executed by the parties below and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

CITY OF TEMPE, an Arizona municipal  
corporation

By: \_\_\_\_\_  
Mark W. Mitchell, Mayor

ATTEST:

\_\_\_\_\_  
Brigitta M. Kuiper, City Clerk

Recommended By:

APPROVED AS TO FORM:

\_\_\_\_\_  
Deputy Public Works Director/City Engineer

\_\_\_\_\_  
Judith R. Baumann, City Attorney

**Contractor warrants that the person who is signing this Contract on behalf of Contractor is authorized to do so and to execute all other documents necessary to carry out the terms of this Contract.**

CONTRACTOR:

\_\_\_\_\_  
Company Name

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

Its: \_\_\_\_\_  
Title

Tax ID No.

\_\_\_\_\_  
Witness [IF CONTRACTOR IS INDIVIDUAL]

8.1.  
**BIDDER'S CHECK SHEET**

This check sheet lists the items a bidder must include with its sealed bid.

	Included
Competitive Sealed Bid Forms (Confirm receipt of Addenda)..... Exhibit 8.2	<input type="checkbox"/>
10% Bid Guarantee (see Invitation for Bids section 4.3) .....	<input type="checkbox"/>
EMOD and Loss Ratio Information (see Invitation for Bids section 4.6.2) .....	<input type="checkbox"/> Separate Envelope
Bidder's Project References.....Exhibit 8.3	<input type="checkbox"/>
Bidder's List of Proposed Subcontractors .....Exhibit 8.4	<input type="checkbox"/> Separate Envelope
Competitive Sealed Bid Certification Form .....Exhibit 8.5	<input type="checkbox"/>
Affidavit Demonstrating Lawful Presence in the United States (see Invitation for Bids Section 4.6.1, add if applicable).....Exhibit 8.11	<input type="checkbox"/>
Affidavit of No Collusion in Bidding .....Exhibit 8.12	<input type="checkbox"/>
Affidavit of Compliance with Tempe City Code.....Exhibit 8.13	<input type="checkbox"/>
Acknowledgement Regarding Letter of Good Standing (see Invitation for Bids section 4.7.2).....Exhibit 8.14	<input type="checkbox"/> Separate Envelope

**NOTE: THE BIDDER IS SOLELY RESPONSIBLE FOR SUBMITTING WITH ITS BID ALL ITEMS REQUIRED BY THIS INVITATION FOR BID DOCUMENT. THIS CHECK SHEET IS PROVIDED SOLELY TO AID THE BIDDER IN PREPARING ITS BID SUBMITTAL, AND SHALL NOT BE CONSTRUED AS IMPOSING RESPONSIBILITY ON THE PART OF THE CITY OF TEMPE.**

8.2.  
**COMPETITIVE SEALED BID FORMS**

Place: Tempe, Arizona

Date: \_\_\_\_\_

Mayor and City Council  
City of Tempe  
Tempe, Arizona 85281

In compliance with your Invitation for Bids and all conditions of the Contract, \_\_\_\_\_, a corporation or limited liability corporation organized under the laws of the State of \_\_\_\_\_; a partnership consisting of \_\_\_\_\_; or an individual trading as \_\_\_\_\_, of the City of \_\_\_\_\_, and the County of \_\_\_\_\_, hereby proposes and agrees to furnish any and all plans, materials, labor, construction equipment, service, and transportation (all applicable taxes included) of the **FIBER OPTIC CABLE INSTALLATION AND ITS IMPROVEMENTS – RURAL ROAD FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD, PROJECT NO. 6907261, FEDERAL AID PROJECT NO. TMP-0(240)D, ADOT TRACS NO. 0000 MA TMP SZ166 01C** and to install the material therein for City in a good and workmanlike and substantial manner and to the satisfaction of City or its properly authorized agents and strictly pursuant to and in conformity with the Contract and other documents that may be made by City or their properly authorized agents, as provided herein, at the following prices:

# City of Tempe

Project No. 6907261

Fiber Optic Cable Installation and ITS Improvements - Rural Rd from Alexander Blvd to McKellips Rd



## Base Bid

Item No.	Item Name	Quantity	Unit	Unit Cost	Total Cost
1	No. 7 Deep Pull Box	87	EA		
2	No. 9 Pull Box	11	EA		
3	48 Strand Fiber Optic Cable	103208	LF		
4	2" ITS Conduit	2995	LF		
5	2-2" ITS Conduit	40	LF		
6	3-2" ITS Conduit	2648	LF		
7	4-2" ITS Conduit	44070	LF		
8	Terminal Fiber Optic Splice Closure	2	EA		
9	Mid-Span Fiber Optic Splice Closure	27	EA		
10	Full Fiber Optic Splice Closure	3	EA		
11	Gigabit Fiber Switch	6	EA		
12	Fiber Switch	26	EA		
13	4-Port Fiber Optic Patch Panel with 4 STrand SMFO	32	EA		
14	Duplex ST-SC Fiber Optic Patch Cable	62	EA		

15	Remove Pull Box	6	EA		
16	AC Power Receptacle	18	EA		
17	Mobilization	1	LS		
18	Loop Detector	1	AL	\$20,000.00	\$20,000.00
19	Potholes	1	AL	\$75,000.00	\$75,000.00
20	Traffic Control	1	AL	\$250,000.00	\$250,000.00
21	Storm Water Pollution Prevention Plann (SWPPP)	1	AL	\$10,000.00	\$10,000.00
<b>Total Base Bid:</b>					

The undersigned hereby declares that Contractor has visited the site and has carefully examined the Contract related to the work covered by the above bid.

The undersigned understands that, when it is in the best interests of the City of Tempe, the City may cancel this solicitation, or may reject any and all bids in whole or in part, or may waive any informalities in the bids received.

Contractor's performance shall not start until after receiving the Notice to Proceed, and the work will be completed within four hundred twenty (420) consecutive calendar days after the Notice to Proceed date.

The undersigned hereby acknowledges receipt of the following Addenda: \_\_\_\_\_

and Contractor's bid has been adjusted to reflect any changes.

Respectfully submitted,

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

Its: \_\_\_\_\_  
Title

\_\_\_\_\_  
Contractor's License No.

\_\_\_\_\_  
Federal I.D. No./Social Security No.

\_\_\_\_\_  
Tax ID No.

For: \_\_\_\_\_  
Company Name

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_



## 8.3.

**FIBER OPTIC CABLE INSTALLATION AND ITS IMPROVEMENTS –  
RURAL ROAD FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD  
PROJECT NO. 6907261**

Each bidder shall list at least three (3) projects, if possible, similar in scope to this project, that bidder has completed. Show references in the space provided below (or attached separate sheet):

[illegible]

8.4.

## FIBER OPTIC CABLE INSTALLATION AND ITS IMPROVEMENTS

## RURAL ROAD FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD

**% of Total  
Contract**

8.5.

**COMPETITIVE SEALED BID  
CERTIFICATION FORM**

**FIBER OPTIC CABLE INSTALLATION AND ITS IMPROVEMENTS –  
RURAL ROAD FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD  
PROJECT NO. 6907261**

Bidder certifies that it is a: \_\_\_\_\_ proprietorship; \_\_\_\_\_ partnership; \_\_\_\_\_ corporation; \_\_\_\_\_ other.

Arizona Sales Tax No. \_\_\_\_\_

Use Tax No. for Out-of-State Supplier \_\_\_\_\_

Taxpayer's Federal Identification No. \_\_\_\_\_

Bidder certifies that it has read, understands, and will fully and faithfully comply with this Invitation for Bids, its attachments, and any referenced documents. Bidder also certifies that the bid was independently developed without consultation with any other Bidders or potential Bidders.

Company's Legal Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State and Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Company's Fax Number: \_\_\_\_\_

Company's Toll Free Number: \_\_\_\_\_

Signature: \_\_\_\_\_

Printed Name and Title: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

**MAILING ADDRESSES**

Purchase Order Address: (If different from above)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State and Zip Code: \_\_\_\_\_

Payment Address: (If different from above)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State and Zip Code: \_\_\_\_\_

8.6.

**CERTIFICATION BY CONTRACTOR AUTHORIZING  
EMPLOYEES TO SIGN BINDING AGREEMENTS**

**FIBER OPTIC CABLE INSTALLATION AND ITS IMPROVEMENTS –  
RURAL ROAD FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD  
PROJECT NO. 6907261**

The following employees in our organization are duly authorized to sign binding agreements for and on behalf of the Owner, Partner, or Corporation, including, but not limited to, Pay Requests, Change Orders, Required Certifications, etc.:

Type or Print Name

Signature

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Contractor Name

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Signed By

(Owner, Partner, or Principal of the Corporation)

Printed Name

---

Title

---

Date

---

**PERFORMANCE BOND FORM**  
(Bond Amount to Be Equal to 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_ (hereinafter called the Principal), as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ (hereinafter called the Surety), are held and firmly bound unto \_\_\_\_\_ (hereinafter called the Obligee) in the amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), for the payment whereof the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the / day of /, 2017, to complete Project No. 6907261, Federal Aid Project No. TMP-0(240)D, ADOT Tracs No. 0000 MA TMP SZ166 01C, which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of this obligation is such, that if the Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the Contract during the original term of the Contract and any extension of the Contract, with or without notice to the Surety, and during the life of any guaranty required under the Contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of title 34, chapter 2, article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of title 34, chapter 2, article 2, Arizona Revised Statutes, to the extent as if it were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
PRINCIPAL

\_\_\_\_\_  
SEAL

By:\_\_\_\_\_

\_\_\_\_\_  
\*SURETY

\_\_\_\_\_  
SEAL

By:\_\_\_\_\_

\_\_\_\_\_  
AGENCY ADDRESS

\*Surety hereby acknowledges it holds a certificate of authority to transact surety business in the State of Arizona, issued by the director of the department of insurance pursuant to Title 20, Chapter 2, Article 1, Arizona Revised Statutes.

8.8.

**PAYMENT BOND FORM**

(Bond Amount to Be Equal to 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_ (hereinafter called the Principal), as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ (hereinafter called the Surety), are held and firmly bound unto \_\_\_\_\_ (hereinafter called the Obligee) in the amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), for the payment whereof the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the / day of /, 2017, complete Project No. 6907261, Federal Aid Project No. TMP-0(240)D, ADOT Tracs No. 0000 MA TMP SZ166 01C which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of this obligation is such, that if the Principal promptly pays all monies due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in the Contract, this obligation is void. Otherwise it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of title 34, chapter 2, article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of title 34, chapter 2, article 2, Arizona Revised Statutes, to the same extent as if they were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as a part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
PRINCIPAL

\_\_\_\_\_  
SEAL

By:\_\_\_\_\_

\_\_\_\_\_  
\*SURETY

\_\_\_\_\_  
SEAL

By:\_\_\_\_\_

\_\_\_\_\_  
AGENCY ADDRESS

\*Surety hereby acknowledges it holds a certificate of authority to transact surety business in the State of Arizona, issued by the director of the department of insurance pursuant to Title 20, Chapter 2, Article 1, Arizona Revised Statutes.



8.9.  
**UNCONDITIONAL WAIVER AND RELEASE  
FOR CONTRACTOR'S PAYMENT  
AND SETTLEMENT OF CLAIMS**

Upon receipt of payment from the City of Tempe, the undersigned:

Contractor's Name: \_\_\_\_\_

Contractor's Address: \_\_\_\_\_

The undersigned has been paid and acknowledges having received final payment from the City of Tempe in the amount of \$\_\_\_\_\_ [state dollar amount for final, total contract amount] for full and final payment of all work, services, equipment, labor, skill, and material furnished, delivered, and performed by the undersigned for the City or anyone in the construction [or other services] for FIBER OPTIC INSTALLATION AND ITS IMPROVEMENTS – RURAL ROAD FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD and PROJECT NO. 6907261, FEDERAL AID PROJECT NO. TMP-0(240)D, ADOT TRACS NO. 0000 MA TMP SZ166 01C; and does hereby waive and release any and all rights to mechanic's liens, any state or federal statutory bond right, any private bond right, any claim for payment, and any and all rights under any applicable federal, state, or local laws related to claim or payment rights for persons in the undersigned's position held on the above-referenced project against the City of Tempe, for this value received. The undersigned further agrees to defend, indemnify, and hold harmless the City of Tempe against any and all liens, claims, suits, actions, damages, charges, and expenses whatsoever, which the City may incur, arising out of the failure of the undersigned to pay in full for all work, services, equipment, labor, skill, and material furnished with regard to the project.

The undersigned, in consideration of the payment acknowledged, hereby warrants that he/she has already paid or will pay using the monies received from this final payment to promptly pay in full all of his contractors, subcontractors, laborers, materialmen, and suppliers for all work, materials, equipment, or services provided to the above-referenced project.

\_\_\_\_\_  
Contractor Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
By (Print Name and Title)

Notice: This document waives rights unconditionally and states that you have been paid for giving up those rights. This document is enforceable against you if signed, even if you have not been paid. If you have not been paid in full, use a conditional release form.

[NOTARY SEAL TO FOLLOW]

STATE OF ARIZONA )  
COUNTY OF MARICOPA )

On \_\_\_\_ day of \_\_\_\_\_, 2017, \_\_\_\_\_ personally appeared before me, and proved by lawful identification documents to be the person who signed the preceding document in my presence, and who affirmed to me that the contents therein are truthful and accurate to the best of his/her knowledge and belief.

Notary Seal

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Printed Name

My Commission Expires:

\_\_\_\_\_

**PROMPT PAYMENT AND RETURN OF RETENTION REQUIREMENTS****MEASUREMENTS AND PAYMENT:****Partial Payments:**

If satisfactory progress is being made, the contractor will receive a payment based on the amount of work completed. Progress payments may be made by the LPA/Subrecipient Procurement Office to the contractor on the basis of an approved estimate of the work performed during a preceding period of time. The progress payments shall be paid on or before 14 days after the estimate of the work is approved. The estimate of the work shall be deemed received by the LPA/Subrecipient Procurement Office on submission to the person designated by the LPA/Subrecipient Procurement Office for the submission, review or approval of the estimate of the work. The LPA/Subrecipient Procurement Office by mutual agreement may make progress payments on contracts of less than 90 days and shall make monthly progress payments on all other contracts. Payment to the contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under the contract may include payment for material and equipment.

An estimate of the work submitted shall be deemed approved and certified for payment after seven days from the date of submission unless before that time the LPA/Subrecipient Procurement Office or Designee prepares and issues a specific written finding setting forth those items in detail in the estimate of the work that are not approved for payment under the contract. The contractor shall work with the LPA/Subrecipient or the LPA/Subrecipient Designee to finalize monthly estimate. The progress payments shall be paid on or before 14 days after the estimate of the work is certified and approved in accordance with Arizona Revised Statutes Section 34-221.

The contractor shall pay to the contractor's subcontractors or material suppliers and each subcontractor shall pay to the subcontractor's subcontractor or material supplier, within seven days of receipt of each progress payment the respective amounts allowed the contractor or subcontractor on account of the work performed by the subcontractors, to the extent of each subcontractor's interest, except that no contract for construction services may materially alter the rights of any contractor, subcontractor or material supplier to receive prompt and timely payment.

A subcontractor may notify the LPA/Subrecipient Procurement Office in writing requesting that the subcontractor be notified by the Subrecipient Procurement Office in writing within five days from payment of each progress payment made to the contractor.

**Subcontractor Payments:**

- (1) **Retention:** If the prime contract does not provide for retention, the contractor and each subcontractor of any tier shall not withhold retention on any subcontract. If the prime contract provides for retention, the prime contractor and each subcontractor of any tier shall not retain a higher percentage than the LPA/Subrecipient may retain under the prime contract.

- (2) No Set-offs Arising from Other Contracts:** If a subcontractor is performing work on multiple contracts for the same contractor or subcontractor of any tier, the contractor or subcontractor of any tier shall not withhold or reduce payment from its subcontractors on the contract because of disputes or claims on another contract.
- (3) Partial Payment:** The contractor and each subcontractor of any tier shall make prompt partial payments to its subcontractors within seven days of receipt of payment from the LPA/Subrecipient Procurement Office. Notwithstanding any provision of Arizona Revised Statutes Section 34-221, the parties may not agree otherwise.
- (4) Final Payment:** The contractor and each subcontractor of any tier shall make prompt final payment to each of its subcontractors. The contractor and each subcontractor of any tier shall pay all monies, including retention, due to its subcontractor within seven days of receipt of payment. Notwithstanding any provision of Arizona Revised Statutes Section 34-221, the parties may not agree otherwise.
- (5) Payment Reporting:** For the purposes of this subsection “Reportable Contracts” means any subcontract, of any tier, DBE or non-DBE, by which work shall be performed on behalf of the contractor and any contract of any tier with a DBE material supplier. The requirements of this subsection apply to all Reportable Contracts.

The requirements of this subsection apply to all Reportable Contracts. Payment Reporting for all Reportable Contracts shall be done through the LPA DBE System which can be accessed at AZ UTRACS on the Arizona Transportation Business Portal at [www.azutracs.com](http://www.azutracs.com). No later than fifteen calendar days after the preconstruction conference, the contractor shall log into the system and enter or verify the name, contact information, and subcontract amounts for Reportable Contracts on the project. As Reportable Contracts are approved over the course of the contract, the contractor shall enter the subcontractor information in the LPA DBE System. Reportable contracts information shall be entered into the system no later than five calendar days after approval by the LPA/Subrecipient Procurement Office.

The contractor shall report on a monthly basis indicating the amounts actually paid and the dates of each payment under any Reportable Contract on the project. The contractor shall provide information for payments made on all Reportable Contracts during the previous month by the last day of the current month. In the event that no payments were made during a given month, the contractor shall identify that by entering a dollar value of zero. If the contractor does not pay the full amount of any invoice from a subcontractor, the contractor shall note that and provide the reasons in the comment section of the Monthly Payment Audit of the LPA DBE System.

In addition, the contractor shall require that all participants in any Reportable Contract electronically verify receipt of payment on the contract within 15 days of receipt of electronic payment notification and the contractor shall actively monitor the system to ensure that the verifications are input. The contractor shall proactively work to resolve any payment discrepancies in the system between payment amounts it reports and payment confirmation amounts reported by others.

The contractor shall ensure that all Reportable Contract payment activity is in the LPA DBE System. This includes all lower-tier Reportable Contracts.

The contractor shall maintain records for each payment explaining the amount requested by the subcontractor, and the amount actually paid pursuant to the request, which may include but are not limited to, estimates, invoices, pay requests, copies of checks or wire transfers, and lien waivers in support of the monthly payments in the system.

The contractor shall ensure that a copy of this Subsection is included in every Reportable Contract of every tier.

- (a) **Sanctions for Inadequate Reporting:** For each Reportable Contract on which the contractor fails to submit timely and complete payment information the LPA/Subrecipient Procurement Office will retain \$1,000.00 as liquidated damages, from the monies due to the contractor. Liquidated damages will be deducted each month for each Reportable Contract on which the contractor fails to submit payment information until the contractor provides the required information as described herein. After 90 consecutive days of non-reporting, the liquidated damages will increase to \$2,000.00 for each subsequent month, for each Reportable Contract on which the contractor fails to report until the information is provided. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.
- (6) **Completion of Work:** A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted by the LPA/Subrecipient Procurement Office.
- (7) **Disputes:** If there is a discrepancy between what is reported by the contractor in the LPA DBE System and what the subcontractor indicates, an alert email will automatically be sent to the contractor. The email will be sent to the email address provided by the contractor in the LPA DBE System. It is the contractor's responsibility to ensure that the email address in the system is kept current.

The contractor shall provide a verifiable explanation of the discrepancy in the LPA DBE System as early as practicable but in no case later than seven days after the date of the alert email.

The LPA/Subrecipient will determine whether the contractor has acted in good faith concerning any such explanations. The LPA/Subrecipient and ADOT BECO reserves the right to request and receive documents from the contractor and all subcontractors of any tier, in order to determine whether prompt payment requirements are met.

The contractor shall implement and use the dispute resolution process outlined in the subcontract or by following the LPA/Subrecipient escalation process, to resolve payment disputes.

- (8) **Non-compliance:** Failure to make prompt partial payment, or prompt final payment including any retention, within the time frames established above, will result in remedies, as the LPA/Subrecipient Procurement Office deems appropriate, which may include but are not limited to:

- (a) **Liquidated Damages:** These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.
  - (i) The LPA/Subrecipient Procurement Office will withhold two times the disputed dollar amount not paid to each subcontractor.
  - (ii) If full payment is made within 30 days of the LPA/Subrecipient Procurement Office's payment to the contractor, the amount withheld by the LPA/Subrecipient Procurement Office will be released.
  - (iii) If full payment is made after 30 days of the LPA/Subrecipient Procurement Office's payment to the contractor, the LPA/Subrecipient Procurement Office will release 75 percent of the funds withheld. The LPA/Subrecipient Procurement Office will retain 25 percent of the monies withheld as liquidated damages.
- (b) **Additional Remedies.** If the contractor fails to make prompt payment for three consecutive months, or any four months over the course of one project, or if the contractor fails to make prompt payment on two or more projects within 24 months, the LPA/Subrecipient Procurement Office may, in addition, invoke the following remedies:
  - (i) Withhold monthly progress payments until the issue is resolved and full payment has been made to all subcontractors, subject to the liquidated damages described in paragraph (a) above,
  - (ii) Terminate the contract for default,
  - (iii) Disqualify the contractor from future bidding, temporarily or permanently, depending on the number and severity of violations, if applicable.

In determining whether liquidated damages will be assessed, the extent of the liquidated damages, or additional remedies assessed, the LPA/Subrecipient will consider whether there have been other violations on this or other federal-aid contracts, whether the failure to make prompt payment was due to circumstances beyond the contractor's control, and other circumstances. The contractor may, within 15 calendar days of receipt of the decision of the LPA/Subrecipient, escalate the decision according to the contract's escalation process.

**AFFIDAVIT DEMONSTRATING LAWFUL PRESENCE IN THE UNITED STATES**

A.R.S. § 1-501 and § 1-502 require any individual person or sole owner of the City for a local public benefit (including the award of a contract) to demonstrate his or her lawful presence in the United States. An individual person or sole proprietor who submits a bid for this contract must complete this Affidavit and submit it with the bid, along with a copy of one of the documents listed below.

**LAWFUL PRESENCE IN THE UNITED STATES CAN BE DEMONSTRATED BY  
PRESENTATION OF ONE (1) OF THE DOCUMENTS LISTED BELOW.**

Please present the document indicated below to the City. If mailing the document, attach a copy of the document to this Affidavit. (If the document may not be copied, present the document in person to the City for review and signing of the affidavit.)

- \_\_\_\_\_ 1. An Arizona driver license issued after 1996.  
Print first 4 numbers/letters from license: \_\_\_\_\_
- \_\_\_\_\_ 2. An Arizona non-operating identification License.  
Print first 4 numbers/letters: \_\_\_\_\_
- \_\_\_\_\_ 3. A birth certificate or delayed birth certificate issued in any state, territory or possession of the United States.  
Year of birth: \_\_\_\_\_: Place of birth: \_\_\_\_\_
- \_\_\_\_\_ 4. A United States Certificate of Birth abroad.  
Year of birth: \_\_\_\_\_: Place of birth: \_\_\_\_\_
- \_\_\_\_\_ 5. A United States passport.  
Print first 4 numbers/letters on Passport: \_\_\_\_\_
- \_\_\_\_\_ 6. A foreign passport with a United States Visa.  
Print first 4 numbers/letters on Passport \_\_\_\_\_  
Print first 4 numbers/letters on Visa \_\_\_\_\_
- \_\_\_\_\_ 7. An I-94 form with a photograph.  
Print first 4 numbers on I-94: \_\_\_\_\_
- \_\_\_\_\_ 8. **A United States Citizenship and Immigration Services Employment Authorization Document (EAD).**  
Print first 4 numbers/letters on EAD: \_\_\_\_\_
- \_\_\_\_\_ 9. **Refugee travel document.**  
Date of Issuance: \_\_\_\_\_ Refugee Country: \_\_\_\_\_
- \_\_\_\_\_ 10. **A United States Certificate of Naturalization.**  
Print first 4 digits of CIS Reg. No.: \_\_\_\_\_
- \_\_\_\_\_ 11. **A United States Certificate of Citizenship.**  
Date of Issuance: \_\_\_\_\_ Place of Issuance: \_\_\_\_\_
- \_\_\_\_\_ 12. **A tribal Certificate of Indian Blood.**  
Date of Issuance: \_\_\_\_\_ Name of Tribe: \_\_\_\_\_
- \_\_\_\_\_ 13. **A tribal or Bureau of Indian Affairs Affidavit of Birth.**  
Year of Birth: \_\_\_\_\_ Place of Birth: \_\_\_\_\_

**I DO SWEAR OR AFFIRM UNDER PENALTY OF LAW THAT I AM LAWFULLY PRESENT IN THE UNITED STATES AND THAT THE DOCUMENT I PRESENTED ABOVE AS VERIFICATION IS TRUE.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Business/Company (if applicable)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Address

Date: \_\_\_\_\_

\_\_\_\_\_  
City, State, Zip Code

OFFICE USE ONLY: EMPLOYEE NAME: \_\_\_\_\_  
EMPLOYEE NUMBER: \_\_\_\_\_

**ALL VIOLATIONS OF FEDERAL IMMIGRATION LAW SHALL BE REPORTED TO 1-866-347-2423**

**8.12.  
AFFIDAVIT  
OF NO COLLUSION IN BIDDING**

Bidder		Project	Fiber Optic Cable Installation and ITS Improvements – Rural Rd from Alexander Blvd to McKellips Rd, Project No. 6907261
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**Instructions to Bidder:** Failure to complete this sworn statement and to submit it with your bid will make your bid nonresponsive and your firm ineligible for award consideration.

State of \_\_\_\_\_ )

County of \_\_\_\_\_ )

\_\_\_\_\_  
(Printed Name of Person Authorized to Represent Bidder)

**being first duly sworn, upon oath deposes and says that:**

I am \_\_\_\_\_,

(Title)

of \_\_\_\_\_,

(Name of Bidder Firm, Association, or Corporation)

**and that pursuant to 23 U.S.C. § 112(c) and 23 C.F.R. § 635.112(f), neither I, nor anyone associated with the above-named firm, association, or corporation, has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the above-referenced Project.**

\_\_\_\_\_  
(Signature)

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 2017, by \_\_\_\_\_,  
(day) (month) (year) (Name of Signer, Above)

If by a Corporation, SEAL:

\_\_\_\_\_  
(Signature of Notary Public)

**My Commission Expires:** \_\_\_\_\_  
(Date)





**8.13.**

**AFFIDAVIT OF COMPLIANCE WITH TEMPE CITY CODE  
CHAPTER 2 ARTICLE VIII SECTION 2-603(5)**

Per Tempe City Code Chapter 2 Article VIII Section 2-603(5), it is unlawful for a City vendor or City contractor, because of race, color, gender, gender identity, sexual orientation, religion, national origin, familial status, age, disability, or United States military veteran status, to refuse to hire or employ or bar or discharge from employment any person, or to discriminate against such person in compensation, conditions, or privileges of employment.

City vendors and contractors of fifteen (15) or more employees shall provide a copy of its antidiscrimination policy to the city's procurement officer to confirm compliance with this article. Employers having fourteen (14) or less employees may attest in writing to compliance with this article.

- **CONTRACTOR** means any person who has a contract with the City.
- **VENDOR** means a person or firm in the business of selling or otherwise providing products, materials, or services.

**CONTRACTOR/VENDOR, select one:**

\_\_\_\_\_ Current copy of antidiscrimination policy attached

**OR**

\_\_\_\_\_ I hereby certify \_\_\_\_\_ (contractor/vendor) to be  
in compliance with Tempe City Code Chapter 2 Article VIII Section 2-603(5).

\_\_\_\_\_  
Signature

**Date:** \_\_\_\_\_

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

8.14

**ACKNOWLEDGEMENT REGARDING LETTER IN GOOD STANDING**

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**FIBER OPTIC CABLE INSTLLATION AND ITS IMPROVEMENTS – RURAL ROAD  
FROM ALEXANDER BOULEVARD TO MCKELLIPS ROAD  
PROJECT NO. 6907261**

Signing this document acknowledges contractor's understanding of the requirements outlined in the Invitation for Bid, Section 4.7 stating the following:

**4.7 PRE-CONTRACT AWARD REQUIREMENTS**

**4.7.1** Contractor shall provide a copy of its written health and safety program and any required employee training records or certificates.

**4.7.2 Taxes.** All applicable taxes due and owing by Contractor and all subcontractors shall be considered by City in determining award. At all times, the determination of applicable taxes and rates, and remitting taxes owed, shall be the sole responsibility of Contractor.

**It is the sole responsibility of the Contractor and any subcontractors to obtain a Letter of Good Standing from the Arizona Department of Revenue prior to Contract award. Go to <https://azdor.gov/Collections.aspx> to obtain directions regarding how to submit for the Letter of Good Standing.**

In the event a "denial" letter is received from the Arizona Department of Revenue, should any taxes owed by Contractor or any subcontractors not be remitted in full prior to Contract award along with the receipt of a Letter of Good Standing from Contractor and each subcontractor, the bid shall be considered non-responsive and rejected by the City.

I hereby acknowledge \_\_\_\_\_ (contractor/vendor) will be in compliance with section 4.7 at the time of a contract award.

---

Signature

Date: \_\_\_\_\_

---

Print Name

---

Title

---

Company

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60-29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

##### a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.



d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

#### **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

#### **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

##### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## **2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

## APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the *Federal Highway Administration*, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performance by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the *Federal Highway Administration* to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the *Federal Highway Administration*, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the *Federal Highway Administration* may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with request to any subcontract or procurement as the Recipient or the *Federal Highway Administration* may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.



## APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1687 *et. seq.*).



**Standard Federal Equal Employment Opportunity Construction Contract Specifications  
Executive Order 11246, July 1, 1978**

(a) The equal opportunity clause published at 41 CFR 60-1.4(a) of this chapter is required to be included in, and is part of, all nonexempt Federal contracts and subcontracts, including construction contracts and subcontracts. The equal opportunity clause published at 41 CFR 60-1.4(b) is required to be included in, and is a part of, all nonexempt federally assisted construction contracts and subcontracts. In addition to the clauses described above, all Federal contracting officers, all applicants and all nonconstruction contractors, as applicable, shall include the specifications set forth in this section in all Federal and federally assisted construction contracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to § 60-4.6 of this part and in construction subcontracts in excess of \$10,000 necessary in whole or in part to the performance of nonconstruction Federal contracts and subcontracts covered under the Executive order.

**Standard Federal Equal Employment Opportunity Construction Contract Specifications  
(Executive Order 11246)**

1. As used in these specifications:

a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

d. "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to

achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the *Federal Register* in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority

person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 50-4.3.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if

any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**CERTIFICATION WITH REGARD TO THE PERFORMANCE OF  
PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE  
EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS  
APRIL, 1969**

The bidder \_\_\_\_\_, proposed subcontractor \_\_\_\_\_, hereby certifies that he has \_\_\_\_\_, has not \_\_\_\_\_, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he has \_\_\_\_\_, has not \_\_\_\_\_, filed with the Joint Reporting committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

\_\_\_\_\_  
(Company)

By: \_\_\_\_\_

\_\_\_\_\_  
(Title)

Date: \_\_\_\_\_

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7b (1),) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Information concerning Standard Form 100 (EEO-1) is available from:

Joint Reporting Committee  
P.O. Box 19100  
Washington, D.C. 20036-9100

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

## ARIZONA DEPARTMENT OF TRANSPORTATION

## CONSTRUCTION

## CERTIFICATION OF FINAL DISADVANTAGED BUSINESS ENTERPRISE (DBE) PAYMENTS

*(Submit form for each DBE working on the contract)*

The undersigned Contractor on TRACS No. \_\_\_\_\_ hereby, certifies that full payment was made, to the firm indicated for material and/or work performed under this project's contract as follows:

DBE FIRM AZ UTRACS Registration # \_\_\_\_\_

Name of DBE Firm \_\_\_\_\_ was paid the amount of \_\_\_\_\_

This certificate is made under Federal and State Laws concerning false statement. Supporting documentation for this payment is subject to audit and should be retained for a minimum of three years from project acceptance date. In the event the DBE was not paid in accordance with affidavits submitted by the prime contractor, all documentation supporting the contractor's position should be submitted.

I DECLARE UNDER PENALTY OF PERJURY IN THE SECOND DEGREE, AND ANY OTHER APPLICABLE STATE OR FEDERAL LAWS, THAT THE STATEMENTS MADE ON THIS DOCUMENT ARE TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

**Contractor Company Name:** \_\_\_\_\_

Check One: ☐ Prime Contractor ☐ Subcontractor

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

-----

The undersigned subcontractor/supplier/manufacture for the above named project hereby certified that payments were received and/or justification by the contractor is correct.

I DECLARE UNDER PENALTY OF PERJURY IN THE SECOND DEGREE, AND ANY OTHER APPLICABLE STATE OR FEDERAL LAWS, THAT THE STATEMENTS MADE ON THIS DOCUMENT ARE TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

**DBE Firm Name:** \_\_\_\_\_

Check One: ☐ Subcontractor/Supplier/Manufacturer ☐ Lower-tier Subcontractor/Supplier/Manufacturer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## LABOR STANDARDS CERTIFICATION

\_\_\_\_\_("Subcontractor") has been contracted by \_\_\_\_\_  
(Subcontractor's Name) (Prime Contractor's Name)

for \_\_\_\_\_ on the City of Tempe's Project \_\_\_\_\_ ("Project").  
(Nature and General Scope of Work) (Project Name or Number)

The subcontract is for \$\_\_\_\_\_ Subcontractor's work is expected to commence on \_\_\_\_\_.  
(Dollar Amount) (Month, Day, Year)

**Certification by Subcontractor's Legally Authorized Representative.**

As a legally authorized representative of the Subcontractor, I acknowledge and certify that:

1. The Project is funded through \_\_\_\_\_ (name of Federal Department / Agency or other Federal funding source).
2. The following documents have been incorporated into the above-referenced subcontract, and I (Subcontractor's legally authorized representative, or Subcontractor's Appointee for supervision of payrolls) have reviewed them:
  - (a) The federal regulations in 29 C.F.R. part 3 that interpret and supplement the Copeland "Anti-Kickback" Act;
  - (b) The federal regulations in 29 C.F.R. part 5 that interpret and supplement Davis-Bacon and Related Acts, and the Contract Work Hours and Safety Standards Act;
  - (c) The Cargo Preference Act;
  - (d) The certification of contracts subject to the EEO clause and reports of April 1969;
  - (e) Notice of Requirement for Affirmative Action to ensure EEO (Executive Order 11246) Rev. 4/15/1981;
  - (f) FHWA 1273;
  - (g) Contractor compliance Agreement Assurances and the DBE EPRISE (Rev. 9/16/2016);
  - (h) Standard Specifications 107.18 and 107.19
  - (i) Standard Federal EEO contract Specifications (Executive Order 11246) Rev. 4/15/1981;
  - (j) EEO Compliance Reports, March 1, 2015
  - (k) The wage determination of the U.S. Department of Labor applicable to the Project, \_\_\_\_\_ (specify the Wage Determination).
3. The Subcontractor will insert the documents listed in 2(a)-(k), above, in all lower-tier subcontracts (not incorporate them by reference)
4. Neither the Subcontractor, nor any person or firm that has a substantial interest in the Subcontractor's firm, is debarred, suspended, or otherwise ineligible to be awarded federal contracts.
5. The Subcontractor will not subcontract any part of the above-referenced subcontract to any person or firm that is debarred, suspended, or otherwise ineligible to be awarded federal contracts.
6. The Subcontractor's legal name and contact information is:



Company Name \_\_\_\_\_

Mailing Address \_\_\_\_\_  
(Number & Street) (City, State, Zip code)

Main Phone Number \_\_\_\_\_ Main Fax Number \_\_\_\_\_

7. Subcontractor's Federal Business Tax ID # \_\_\_\_\_ Contractor License # \_\_\_\_\_ and  
AZ UTRACS Registration # \_\_\_\_\_

8. The Subcontractor is (✓ one): ☐ a Corporation, incorporated in the State of \_\_\_\_\_  
☐ a Proprietorship ☐ a Partnership ☐ an LLC ☐ Other (specify): \_\_\_\_\_

9. The following are the Subcontractor's owner(s), partners, and officers (add lines or attach sheets if needed):

(Full Name)	(Title)	(Address)	(Phone)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

10. I (Subcontractor's legally authorized representative, or Subcontractor's Appointee for supervision of payrolls) have reviewed the Wage Determination applicable to this project and have identified the following:

Construction Work Activities the Subcontractor Expects to Be Performing at the Project Job Site	Corresponding Work Classifications Listed in the Applicable Wage Determination
_____	_____
_____	_____
_____	_____

**IMPORTANT:** If no Work Classification is listed in the Wage Determination for a task or activity that the Subcontractor will be performing at the job site, please request a "Additional Classification & Wage Rate" form (SF-1444) from the Prime Contractor.

11. Fringe Benefit information.

- ☐ Yes ☐ No The Subcontractor's employees receive fringe benefits (medical, dental, 401K, training benefits).  
☐ Yes ☐ No The Subcontractor is bound by a signed document such as a Union Agreement.

12. Truck Owner-Operator information.

- ☐ Yes ☐ No The Subcontractor is a Truck Owner-Operator (if Yes, additional documentation will be required).

13. **The penalty for making a false statement in this Certification is prescribed in the U.S. Criminal Code, 18 U.S.C. § 1001.**

**Certification by Subcontractor's Legally Authorized Representative**

I hereby certify that I have reviewed the statements made in this Subcontractor Labor Standards Certification and that, to the best of my knowledge, these statements are true.

\_\_\_\_\_  
(SIGNATURE of Subcontractor's Legally Authorized Representative)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(PRINTED name)

\_\_\_\_\_  
(Title)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Notary Public)



My Commission expires \_\_\_\_\_

**Subcontractor's Appointee for Supervision of Payrolls**

The Subcontractor has designated and appointed \_\_\_\_\_ ("Appointee"),  
(name of Subcontractor's Appointee for Supervision of Payrolls)

Whose original signature appears in the Certification below, to supervise the payment of employees for the

Subcontractor, beginning on \_\_\_\_\_  
(Month, Day, Year)

The Appointee is in a position to have full knowledge of: (a) the facts set forth in the Subcontractor's payroll documents; (b) the Statement of Compliance referred to in 29 C.F.R. 5.5(a)(3)(ii)(B), which the Appointee is to execute with each payroll report; and (c) the Copeland "Anti-Kickback" Act ( 18 U.S.C. § 874, as implemented and supplemented by 29 C.F.R. part 3).

**Certification by Subcontractor's Appointee for Supervision of Payrolls.**

I hereby certify that I have reviewed the statements made in this Subcontractor Labor Standards Certification and that, to the best of my knowledge, these statements are true.

\_\_\_\_\_  
(SIGNATURE of Subcontractor's Appointee for Supervision of Payrolls)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(PRINTED name)

\_\_\_\_\_  
(Title)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Notary Public)



My Commission expires \_\_\_\_\_

**NOTE:** If the Subcontractor's Appointee for Supervision of Payrolls is changed, or a new Appointee is added, a new "Certification by Subcontractor's Appointee for Supervision of Payrolls" must accompany the first payroll for which the new appointee executes a Statement of Compliance.

**CITY OF TEMPE**

**Public Works Department, Engineering Division**

**31 East 5th Street, West Garden Level • Tempe, Arizona 85281**

**Phone 480-350-8200 • Fax 480-350-8591**

According to the appropriate contract provisions, the City of Tempe has approved this date the subletting of the work items described above

\_\_\_\_\_  
(Signature – City of Tempe, Contract Compliance Analyst)

\_\_\_\_\_  
(Date)

**WAGE DETERMINATION 8.22**

General Decision Number: AZ170008 06/02/2017 AZ8

Superseded General Decision Number: AZ20160008

State: Arizona

Construction Type: Highway

Counties: Coconino, Maricopa, Mohave, Pima, Pinal, Yavapai  
and Yuma Counties in Arizona.**HIGHWAY CONSTRUCTION PROJECTS**

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/06/2017
1	01/27/2017
2	06/02/2017

CARP0408-005 07/01/2016

	Rates	Fringes
CARPENTER (Including Cement Form Work).....	\$ 25.48	11.54
-----		

\* ENG10428-001 09/01/2016

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 23.34	9.68
Group 2.....	\$ 26.61	9.68
Group 3.....	\$ 27.69	9.68
Group 4.....	\$ 28.72	9.68

**POWER EQUIPMENT OPERATORS CLASSIFICATIONS:**

GROUP 1: A-frame boom truck, air compressor, Belcrete, boring bridge and texture, brakeman, concrete mixer (skip type), conductor, conveyor, cross timing and pipe float, curing machine, dinky (under 20 tons), elevator hoist (Husky and similar), firemen, forklift, generator (all), handler, highline cableway signalman, hydrographic mulcher, joint inserter, jumbo finishing machine, Kolman belt loader, machine conveyor, multiple power concrete saw,

pavement breaker, power grizzly, pressure grout machine, pump, self-propelled chip spreading machine, slurry seal machine (Moto paver driver), small self-propelled compactor (with blade-backfill, ditch operation), straw blower, tractor (wheel type), tripper, tugger (single drum), welding machine, winch truck

GROUP 2:

ALL COUNTIES INCLUDING MARICOPA: Aggregate Plant, Asphalt plant Mixer, Bee Gee, Boring Machine, Concrete Pump, Concrete Mechanical Tamping-Spreading Finishing Machine, Concrete Batch Plant, Concrete Mixer (paving & mobile), Elevating Grader (except as otherwise classified), Field Equipment Serviceman, Locomotive Engineer (including Dinky 20 tons & over), Moto-Paver, Oiler-Driver, Operating Engineer Rigger, Power Jumbo Form Setter, Road Oil Mixing Machine, Self-Propelled Compactor (with blade-grade operation), Slip Form (power driven lifting device for concrete forms), Soil Cement Road Mixing Machine, Pipe-Wrapping & Cleaning Machine (stationary or traveling), Surface Heater & Planer, Trenching Machine, Tugger (2 or more drums).

MARICOPA COUNTY ONLY: Backhoe < 1 cu yd, Motor Grader (rough), Scraper (pneumatic tired), Roller (all types asphalt), Screed, Skip Loader (all types 3<6 cu yd), Tractor (dozer, pusher-all).

GROUP 3:

ALL COUNTIES INCLUDING MARICOPA: Auto Grade Machine, Barge, Boring Machine (including Mole, Badger & similar type directional/horizontal), Crane (crawler & pneumatic 15>100 tons), Crawler type Tractor with boom attachment & slope bar, Derrick, Gradall, Heavy Duty Mechanic-Welder, Helicopter Hoist or Pilot, Highline Cableway, Mechanical Hoist, Mucking Machine, Overhead Crane, Pile Driver Engineer (portable, stationary or skid), Power Driven Ditch Lining or Ditch Trimming Machine, Remote Control Earth Moving Machine, Slip Form Paving Machine (including Gunnert, Zimmerman & similar types), Tower Crane or similar type.

MARICOPA COUNTY ONLY: Backhoe<10 cu yd, Clamshell < 10 cu yd, Concrete Pump (truck mounted with boom only), Dragline <10 cu yd, Grade Checker, Motor Grader (finish-any type power blade), Shovel < 10 cu yd.

GROUP 4: Backhoe 10 cu yd and over, Clamshell 10 cu yd and over, Crane (pneumatic or crawler 100 tons & over), Dragline 10 cu yd and over, Shovel 10 cu yd and over.

All Operators, Oilers, and Motor Crane Drivers on equipment with Booms, except concrete pumping truck booms, including Jibs, shall receive \$0.01 per hour per foot over 80 ft in addition to regular rate of pay

Premium pay for performing hazardous waste removal \$0.50 per hour over base rate.

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IRON0075-004 08/01/2015

COCONINO, MARICOPA, MOHAVE, YAVAPAI & YUMA COUNTIES

	Rates	Fringes
Ironworker, Rebar.....	\$ 26.00	21.77
Zone 1: 0 to 50 miles from City Hall in Phoenix or Tucson		
Zone 2: 050 to 100 miles - Add	\$4.00	
Zone 3: 100 to 150 miles - Add	\$5.00	
Zone 4: 150 miles & over - Add	\$6.50	

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LABO0383-002 06/01/2016

	Rates	Fringes
Laborers:		
Group 1.....	\$ 17.18	5.01
Group 2.....	\$ 18.08	5.01
Group 3.....	\$ 18.78	5.01
Group 4.....	\$ 19.72	5.01
Group 5.....	\$ 20.58	5.01

LABORERS CLASSIFICATIONS:

GROUP 1: All Counties: Chipper, Rip Rap Stoneman. Pinal County Only: General/Cleanup Laborer. Maricopa County Only: Flagger.

GROUP 2: Asphalt Laborer (Shoveling-excluding Asphalt Raker or Ironer), Bander, Cement Mason Tender, Concrete Mucker, Cutting Torch Operator, Fine Grader, Guinea Chaser, Power Type Concrete Buggy

GROUP 3: Chain Saw, Concrete Small Tools, Concrete Vibrating Machine, Cribber & Shorer (except tunnel), Hydraulic Jacks and similar tools, Operator and Tender of Pneumatic and Electric Tools (not herein separately classified), Pipe Caulker and Back-Up Man-Pipeline, Pipe Wrapper, Pneumatic Gopher, Pre-Cast Manhole Erector, Rigger and Signal Man-Pipeline

GROUP 4: Air and Water Washout Nozzleman; Bio-Filter, Pressman, Installer, Operator; Scaffold Laborer; Chuck Tender; Concrete Cutting Torch; Gunite; Hand-Guided Trencher; Jackhammer and/or Pavement Breaker; Scaler (using boson's chair or safety belt); Tamper (mechanical all types).

GROUP 5: AC Dumpman, Asbestos Abatement, Asphalt Raker II, Drill Doctor/Air Tool Repairman, Hazardous Waste Removal, Lead Abatement, Lead Pipeman, Process Piping Installer, Scaler (Driller), Pest Technician/Weed Control, Scissor Lift, Hydro Mobile Scaffold Builder.

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PAIN0086-001 04/01/2014

	Rates	Fringes
PAINTER		
PAINTER (Yavapai County only), SAND BLASTER/WATER BLASTER (all Counties).....	\$ 19.50	4.85
ZONE PAY: More than 100 miles from Old Phoenix Courthouse \$3.50 additional per hour.		

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 SUAZ2009-001 04/20/2009

	Rates	Fringes
CEMENT MASON.....	\$ 19.28	3.99
ELECTRICIAN.....	\$ 22.84	6.48
IRONWORKER (Rebar)		
Pima County.....	\$ 23.17	14.83
Pinal County.....	\$ 20.27	8.35
LABORER		
Asphalt Raker.....	\$ 15.49	3.49
Compaction Tool Operator....	\$ 14.59	2.91
Concrete Worker.....	\$ 13.55	3.20
Concrete/Asphalt Saw.....	\$ 13.95	2.58
Driller-Core, diamond, wagon, air track.....	\$ 16.94	3.12
Dumpman Spotter.....	\$ 14.99	3.16
Fence Builder.....	\$ 13.28	2.99
Flagger		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 12.35	1.59
Formsetter.....	\$ 16.09	3.97
General/Cleanup Laborer		
Coconino, Maricopa, Mohave, Pima, Yavapai & Yuma.....	\$ 14.54	3.49
Grade Setter (Pipeline).....	\$ 17.83	5.45
Guard Rail Installer.....	\$ 13.28	2.99
Landscape Laborer.....	\$ 11.39	
Landscape Sprinkler Installer.....	\$ 15.27	
Pipelayer.....	\$ 14.81	2.96
Powderman, Hydrasonic.....	\$ 16.39	2.58
OPERATOR: Power Equipment		
Asphalt Laydown Machine.....	\$ 21.19	6.05
Backhoe < 1 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 17.37	3.85
Backhoe < 10 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Clamshell < 10 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Concrete Pump (Truck		

Mounted with boom only)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 19.92	7.10	
Crane (under 15 tons).....\$ 21.35	7.36	
Dragline (up to 10 cu yd)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 18.72	3.59	
Drilling Machine		
(including Water Wells).....\$ 20.58	5.65	
Grade Checker		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 16.04	3.68	
Hydrographic Seeder.....\$ 15.88	7.67	
Mass Excavator.....\$ 20.97	4.28	
Milling Machine/Rotomill.....\$ 21.42	7.45	
Motor Grader (Finish-any		
type power blade)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 21.92	4.66	
Motor Grader (Rough)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 20.07	4.13	
Oiler.....\$ 18.15	8.24	
Power Sweeper.....\$ 16.76	4.44	
Roller (all types Asphalt)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 18.27	3.99	
Roller (excluding asphalt)..\$ 15.65	3.32	
Scraper (pneumatic tired)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 17.69	3.45	
Screed		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 17.54	3.72	
Shovel < 10 cu yd		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 18.72	3.59	
Skip Loader (all types <3		
cu yd).....\$ 18.28	5.30	
Skip Loader (all types 3 <		
6 cu yd)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 18.64	4.86	
Skip Loader (all types 6 <		
10 cu yd).....\$ 20.15	4.52	
Tractor (dozer, pusher -		
all)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....\$ 17.26	2.65	

#### PAINTER

Coconino, Maricopa,		
Mohave, Pima, Pinal & Yuma..\$ 15.57	3.92	

#### TRUCK DRIVER

2 or 3 Axle Dump or		
Flatrack.....\$ 16.27	3.30	
5 Axle Dump or Flatrack.....\$ 13.97	2.89	
6 Axle Dump or Flatrack (<		
16 cu yd).....\$ 17.79		
	6.42	



Belly Dump.....	\$ 14.67	
Oil Tanker Bootman.....	\$ 22.03	
Self-Propelled Street		
Sweeper.....	\$ 13.11	5.48
Water Truck 2500 < 3900		
gallons.....	\$ 18.14	4.55
Water Truck 3900 gallons		
and over.....	\$ 15.92	3.33
Water Truck under 2500		
gallons.....	\$ 15.94	4.16

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of

the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination

- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

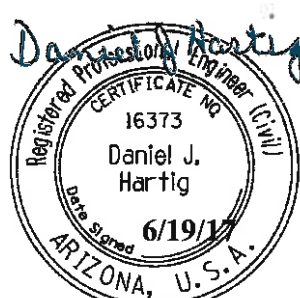
**CITY OF TEMPE**  
**Public Works Department**  
**Engineering Division**



**Technical Specifications**  
**And Special Provisions**

**FIBER OPTIC CABLE INSTALLATION**  
**RURAL ROAD**

**CITY OF TEMPE PROJECT No. 6907261**  
**ADOT TRACS No. 0000 MA TMP SZ166 01C**  
**FEDERAL AID PROJECT No. TMP-0(240)D**



**Expires 3/31/18**

## **SECTION A**

### **General Information**

City of Tempe (COT) Project Number 6907261, Arizona Department of Transportation (ADOT) Project Number 0000 MA TMP SZ166 01C, is designated by the Federal Reference Project number TMP-0(240)D. The project includes ITS improvements along Rural Road from Alexander Boulevard to McKellips Road within the City of Tempe. The proposed work includes installation of four new trunk line conduits, pull boxes, fiber-optic cable, network switches, and testing and integrating ITS equipment with the City of Tempe Transportation Management Center (TMC). This project is located entirely within the City of Tempe in Maricopa County, Arizona. The project is approximately nine miles in length.

The trunk line conduit(s) will be placed as follows:

- northbound right lane as close as practical to the curb and gutter between Alexander Boulevard and the Western Canal
- behind the curb and gutter between the Western Canal and Playa Del Norte
- southbound right lane as close as practical to the curb and gutter between Playa Del Norte and McKellips Road

Except as noted:

- use existing four conduits between Southern Avenue and Alameda Drive
- use existing single conduit between Apache Boulevard and University Drive and install three new conduits

### **A.1 Environmental Mitigation**

The contractor shall adhere to all terms, conditions, and requirements contained in the environmental clearance.

### **Project Mitigation Measures**

#### **Contractor Responsibilities**

- To prevent the introduction of invasive species seeds, the contractor shall inspect all earthmoving and hauling equipment at the equipment storage facility. The equipment shall be washed and free of all attached plant/vegetation and soil/mud debris prior to entering the construction site.
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.

**Contractor Responsibilities (continued)**

- If vegetation clearing will occur during the migratory bird breeding season (March 1–August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify the City of Tempe Civil Engineer at (480) 350-8445 to evaluate the situation. During the nonbreeding season (September 1–February 28) vegetation removal is not subject to this restriction.
- Lead-based paint is present in yellow pavement striping; therefore, the contractor shall notify their employees prior to any disturbance where lead is present in the paint below the 0.5 percent US Department of Housing and Urban Development/US Environmental Protection Agency action levels, but above the US Department of Labor Occupational Safety and Health Administration detection level. As part of the notification, the contractor shall make the US Department of Labor Occupational Safety and Health Administration publication number 3142-12R 2004 Lead in Construction (<http://www.osha.gov/Publications/osha3142.pdf>) available to workers.
- The contractor shall develop a containment plan for debris and construction materials to avoid contamination of the Tempe Town Lake/Salt River. The containment plan shall be approved by the City of Tempe Engineer prior to construction.
- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor shall stop work immediately at that location, notify the City of Tempe Engineer and shall take all reasonable steps to secure the preservation of those resources. The City of Tempe Engineer will contact the Arizona Department of Transportation Environmental Planning Group, Historic Preservation Team, (602.712.8636 or 602.712.7767) immediately, and make arrangements for proper treatment of those resources.
- If human remains or funerary objects are identified during construction, all work shall stop in the vicinity of the find and the contractor shall notify the City of Tempe Engineer. The City of Tempe Engineer will contact the Arizona Department of Transportation Environmental Planning Group, Historic Preservation Team, (602.712.8636 or 602.712.7767), who will notify the Arizona State Museum (Dr. Todd Pitezal, 520.621.4795) pursuant to A.R.S. §41-844. Work in that area shall not resume until authorization is received from Arizona State Museum.
- The contractor shall contact the City of Tempe Engineer who will contact the Arizona Department of Transportation Environmental Planning Group, Historic Preservation Team (602.712.8636 or 602.712.7767) at least 10 (ten) business days prior to the start of ground-disturbing activities to arrange for qualified personnel to monitor and be present during construction.
- The contractor shall comply with the approved Monitoring and Discovery Plan titled “An Archaeological Monitoring and Discovery Plan for the Rural Road ITS Project along Rural Road between McKellips Road and Alexander Boulevard, Tempe, Maricopa County, Arizona.”

### **Contractor Responsibilities (continued)**

- Access to adjacent businesses and residences will be maintained throughout construction.
- If suspected hazardous materials are encountered during construction, work shall cease at that location and the City of Tempe Engineer will be notified immediately to make arrangements for proper treatment or disposal of those materials.
- The contractor shall comply with all local air quality and dust control rules, regulations and ordinances which apply to any work performed pursuant to the contract.
- The contractor shall coordinate any necessary staging or contractor use areas with the City of Tempe Capital Improvement Project Design and Construction Manager (480.350.8630).

## **A.2 Cooperation with utilities**

### **A.2.1 General**

The Contractor shall conform to the requirements of MAG Section 105.6 and as modified herein.

The project has a network of underground and overhead utilities. All work at or in close proximity to said lines shall be performed in accordance with all Federal, State, and local laws and regulations including but not limited to:

- Arizona law regarding "Underground Facilities" (A.R.S. 40-360.21, .22, .24, .26 and .28)
- Arizona law regarding "High Voltage Power Lines and Safety Restrictions" (A.R.S. 40-360.41-.45)
- The Occupational Safety and Health Administration
- The National Electric Safety Code
- APS Transmission and Distribution Construction Standards (T.A.D.C.S.) Manual

The locations of existing underground utilities have been shown on the Plans to the best of the Design Engineer's knowledge; however, it shall be the Contractor's responsibility to field verify all utility locations and to coordinate in a timely manner with the pertinent utility companies so that any obstructing utility installation may be adjusted without delay to the Contractor's project schedule. In addition, the City will not consider additional compensation requests from the Contractor to perform any potholing, utility company coordination, etc. needed to locate/verify utility location, to adjust contract work items as necessary to avoid utility line conflict, to cooperate with utilities in adjusting schedule as needed to allow for utility company work, relocations, etc. The Contractor's bid shall allow for and include the above coordination and work adjustments based on the best available information known or provided in the contract.

The following utility companies and agencies have facilities within the project limits and the email addresses should put the Contractor in contact with the proper utility personnel:

Company Name	Contact Person	Email
Air Products	Daniel Svir	svird@airproducts.com
AT&T	Joseph Forkert	joef@forkertengineering.com
Level 3	Carlos Muniz	carlos.muniz@level3.com
Century Link	Karen Brown Gellar	Karen.brown1@CenturyLink.com
SRP -Power	Jolie Donahue	Jolie.donahue@srpnet.com
SRP -Water	Susana Ortega	Susana.ortega@srpnet.com
El Paso Natural Gas/Kinder Morgan	Brett Berry	Brett_berry@kindermorgan.com
Cox	Jeremy Slaughter	Jeremy.slaughter@cox.com
Verizon/ZAYO	Michael Chavez	Michael.chavez@zayogroup.com
City of Tempe	Mark Weber	mark_weber@tempe.gov
City of Phoenix	Larry Valenzuela	Larry.valenzuela@phoenix.gov
Southwest Gas	Will Fielder	Will.fielder@swgas.com
ADOT	Dale Drost	ddrost@azdot.gov
APS	Ron Gandara	ronnie.gandara@aps.com
ASU	Carl Miller	Carl.miller@asu.edu
UPRR	Alexander Popovici	apopovic@up.com
Valley Metro	Arthur Mehler	amehler@valleymetro.org

### A.2.2 Potholing

The Contractor is advised that a "Quality Level B" locating was performed for the project during the design phase and information is noted on the plans. It shall be the Contractor's responsibility to perform any potholing to determine potential conflicts with existing underground features and utilities prior to performing any underground work. At a minimum, the City requires that, the Contractor shall perform potholes where new conduit trenching is proposed. In addition, the Contractor shall evaluate the need for potholes where horizontal drilling for conduits is proposed based on the Plans and blue stake markings. The contractor shall submit to the Engineer the list of potholes for approval as described in bid item 21.

The Contractor is advised that the existing utilities depicted on the Plans have been presented to the best ability of the Designer based on available information; however, confirming the locations and locating of existing utilities shall be the responsibility of the Contractor.

### A.3 Materials Checklist

The Materials Checklist (Appendix A) indicates which materials to be used in constructing this project require testing for approval. The number of recommended samples for acceptance (ACCP) and independent assurance (IAS) testing are derived from the "Materials Quality Assurance Program" (Series 900 of the Arizona Department of Transportation {ADOT} Materials Testing Manual) which includes the Sampling Guide Schedule (Appendix C). The



recommendations are estimates for the plan quantity and may change due to actual material production rates and timing of the proposed work. Documentation must be provided in the Materials Exception Report if the required testing detailed in the Materials Checklist (attached) is not performed. All materials used on the project which require testing should be listed. Materials used which were not originally listed should be added.

Upon completion of the project, the City of Tempe will submit completed copies of the Materials Checklist, Testing Summaries, and Materials Certification/Exception Report to the ADOT Materials Group, Quality Assurance Engineer.

#### **A.4 Sequence of Work/Construction Schedule**

**GENERAL:** Shall conform to the requirements of MAG Section 108.5 except as modified herein:

Allowable work hours are governed by the City of Tempe and may include restrictions due to noise and traffic. Work outside the published hours may be permissible provided a construction schedule has been prepared along with a letter of request addressed to, submitted to, and approved by the City of Tempe. The Contractor shall coordinate with the Engineer.

The schedule shall identify the work to be performed, including the location and duration of planned activities. Submittals shall be made a minimum of seven days prior to the planned work to allow sufficient time for the City to review the request and schedule any necessary inspections. The Contractor shall be responsible for payment for all overtime and off hour's inspection and testing services that occur outside the normal and accepted working hours indicated above.

**SEQUENCE:** The installation of all conduit and pull boxes must be completed to the satisfaction of the Engineer prior to the installation of fiber. The Engineer shall have total discretion and authority to accept or reject the Contractor's proposed sequence of work.

**CONTRACTOR'S CONSTRUCTION SCHEDULE:** MAG Section 108.4 shall be modified to add: The Contractor shall be responsible for planning, scheduling and reporting the progress of the work as to ensure timely completion of the work called for in the contract.

1. The schedule shall be time-scaled in calendar days. All activities shall be plotted on their early start and finish dates.
2. The schedule shall show the order and interdependence of activities and the sequence of work as reflected in the schedule report as described below. The critical activities shall be prominently distinguished.
3. The schedule shall include, in addition to all construction activities, such tasks as mobilization, demobilization, submittal and approval of samples of materials and shop drawings, procurement of significant materials and equipment, and fabrication of special items, as well as installation and testing; and interfacing with other projects/Contractors/utility companies/ etc.

No direct measurement or direct payment will be made for Contractor costs relating to preparation and submission of schedules and reports and revisions thereto.

## **A.5 Weekly Meetings**

The Contractor shall schedule and administer weekly progress meetings, construction foreman meetings; in addition to special meetings, as needed, throughout the progress of work. The location and designated time shall be determined by the Contract Administrator. The Contractor shall:

1. Prepare agenda for meetings.
2. Provide notice of special meetings.
3. Make logistical arrangements for meetings.
4. Preside at meetings.
5. Record minutes; include significant proceedings and decisions.
6. Prepare formal minutes and distribute copies to meeting participants, City of Tempe Engineer, and parties affected by decisions made at meeting, within 3 working days after each meeting:

Representatives of the Contractor, Subcontractors, and Suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

**At the first weekly meeting, the contractor shall submit a plan describing the construction method to install the conduit for the entire project.**

No direct measurement or direct payment will be made for weekly meetings.

## **A.6 General Requirements**

Improvements shall be constructed in accordance with MAG Uniform Standard Specifications and details for Public Works Construction (2017 Revision to the 2015 edition); Tempe Supplement to the MAG Uniform Standard Details and Specifications for Public Works Construction, and the Arizona Department of Transportation Standard Details and Specifications.

## **A.7 Device Inventory**

In addition to contract section 2.12 (in Engineering Contract Document), "AS-BUILT DRAWINGS", the Contractor shall provide a detailed inventory, in both hard copy and Excel format, for all products provided for this project. It shall include manufacturer name, model number, serial number, MAC address (if applicable), date of acquisition, date of installation, intersection location and date of warranty expiration. User's manuals/guides, software and other documentation for all products provided for this project shall also be provided to the Engineer.

## **A.8 Warranty**

In addition to Contract section 6.5 (in Engineering Contract Document), "WARRANTY", the Contractor shall certify that the installation of all material is in accordance with the manufacturer's recommendations and these Technical Specifications.

The contractor shall obtain such manufacturer's or producer's warranties or guaranties on all items, materials, electrical or mechanical equipment.

In addition, the contractor warranty shall include providing for satisfactory in-service operation of the mechanical and electrical equipment and related components for a period of one year following project acceptance.

Should any defect develop during this one-year period, the malfunction or defect shall be corrected at no expense to the City, including all labor, material and associated costs. If the manufacturer provides a longer warranty period, the Contractor shall provide that warranty to the Engineer.

## **SECTION B: Bid Items, Measurements and Payment**

Measurement and payment for all pay items in the proposal shall be as specified in the applicable section of the Maricopa Association of Governments Uniform Standard specifications for Public Works Construction (MAG Specifications) latest edition, and supplements, and any applicable City Specifications or Standards as specified in these Technical Specifications. In the event of a conflict between these Specifications and the requirements of the plans, detail drawings, or City Standard Details and the MAG Specifications, these Specifications shall prevail.

Payment of the contract items shall be compensation in full for furnishing all overhead, labor, material, tools, equipment, and appurtenances necessary to complete the work in a good, neat, and satisfactory manner as indicated on the plans, or as specified, with all necessary connections and appurtenances for the satisfactory use of and/or operation of said item. No additional payment will be made for work related to each item unless specifically noted or specified. Measurement will be in place for the completed work with no allowance for waste.

### **B.1 Non-Payment Items**

Any and all labor, materials, and equipment required for this project that is not included in one of the payment items shall be considered incidental and there will be no measurement or payment for that work.

### **B.2 Payment Items**

#### **BID ITEM 1: No. 7 DEEP PULL BOX**

##### **Description**

The work under this item shall consist of furnishing and installing No. 7 Deep Pull Boxes at the locations shown in the Plans in accordance with ADOT standard drawing TS-1.2. (See Appendix C for pull box table)

##### **Materials**

All No. 7 Deep Pull Boxes and lids shall conform to the applicable ADOT ITS Standard Drawings, Plans and Technical Specifications. Pull box lids shall bear the words "CITY OF TEMPE ITS", "CITY OF TEMPE IT", or "COMMUNICATIONS" as specified in the pull box location table. Markings shall be clearly defined and shall be placed parallel to the long side of the cover. Letters shall be a minimum of 2 inches in height.

No. 7 Deep Pull Boxes shall be a precast, polymer concrete, fiberglass reinforced, pull box, conforming to the Plans. A certificate of compliance shall be supplied for structural capabilities and materials used in manufacturer. Concrete pull boxes and lids shall not be used. Contractor shall submit test results to certify that the pull box sidewalls and lids remain intact when subjected to the loading conditions specified.

No. 7 Deep Pull Boxes shall be 24 inches in depth, and consist of a single-piece box unit. Stacked units shall not be used unless otherwise specified on the Plans or in the Technical Specifications. Chipped, cracked or otherwise damaged pull boxes and lids will not be accepted.

### **Construction Requirements**

The pull box locations shown on the plans are approximate and may be adjusted in the field with the approval of the Engineer. The preferred location for the pull boxes is non-concrete or sidewalk areas. The contractor shall be responsible for restoring the surrounding surface conditions back to their original state, including concrete areas. The compaction around the box shall not damage the pull box. The contractor shall replace pull boxes damaged by compaction at no cost to the City of Tempe.

### **Method of Measurement**

This item will be measured for each new No. 7 Deep Pull Box that is acceptably installed.

No additional measurement or payment will be made for restoring decomposed granite, other landscape material, or concrete sidewalk to existing conditions before construction activities.

### **Basis of Payment**

The accepted quantities of No. 7 Deep Pull Boxes, measured as provided above, will be paid in accordance with the contract unit price, complete in place which will be full compensation for the pull box described and specified herein and on the Plans, complete and in place including labor, materials, restoration of landscaping items, concrete, excavating, hand digging, backfilling, and incidentals required to complete the work.

## **BID ITEM 2: No. 9 PULL BOX**

### **Description**

The work under this item shall consist of furnishing and installing No. 9 Pull Boxes at the locations shown in the Plans in accordance with ADOT standard drawing FM-2.03. (See Appendix C for pull box table)

### **Materials**

All No. 9 Pull Boxes and lids shall conform to the applicable ADOT ITS Standard Drawings, Plans and Technical Specifications, except pull box lids shall bear the words "CITY OF TEMPE IT" or "Communications" as specified on the Plans and in the Technical Specifications. Markings shall be clearly defined and shall be placed parallel to the long side of the cover. Letters shall be a minimum of 2 inches in height.

No. 9 Pull Boxes shall be a precast, polymer concrete, fiberglass reinforced, pull box, conforming to the Plans. A certificate of compliance shall be supplied for structural capabilities and materials used in manufacturer. Concrete pull boxes and lids shall not be used. Contractor shall submit test results to certify that the pull box sidewalls and lids remain intact when subjected to the loading conditions specified.

Chipped, cracked or otherwise damaged pull boxes and lids will not be accepted.

### **Construction Requirements**

The pull box locations shown on the plans are approximate and may be adjusted in the field with the approval of the Engineer. The preferred location for the pull boxes is non-concrete or sidewalk areas. The contractor shall be responsible for restoring the surrounding surface conditions back to their original state, including concrete areas. The compaction around the box shall not damage the pull box. The contractor shall replace pull boxes damaged by compaction at no cost to the City of Tempe.

### **Method of Measurement**

This item will be measured for each new No. 9 Pull Box that is acceptably installed.

No additional measurement or payment will be made for restoring decomposed granite, other landscape material, or concrete sidewalk to existing conditions before construction activities.

### **Basis of Payment**

The accepted quantities of No. 9 Pull Boxes, measured as provided above, will be paid in accordance with the contract unit price, complete in place which will be full compensation for the pull box described and specified herein and on the Plans, complete and in place including labor, materials, restoration of landscaping items, concrete, excavating, hand digging, backfilling, and incidentals required to complete the work.

## **BID ITEM 3: 48 STRAND FIBER OPTIC CABLE**

### **Description**

The work under this item shall consist of furnishing, installing and testing 48 strand Fiber Optic Cable as required for a fully functional and operational communications network.

The Contractor shall furnish all Fiber Optic Cable from the same manufacturer, which shall be ISO 9001 or 9002 certified. All such cable shall be new and in strict accordance with the following requirements.

### **Material Requirements**

At a minimum, each 48 strand Fiber Optic Cable shall meet the following requirements:

- 9/125 Single Mode Fiber Optic Cable capable of supporting wavelengths of 1310/1550 nm
- All materials in the cable shall be dielectric.
- Shall be loose tube cable construction with a polyethylene outer jacket
- Shall be in buffer tubes of 12 fibers each, color coded in accordance with EIA-598-A
- Each buffer tube shall utilize a gel-free design that is fully water blocked using materials that are craft friendly, requiring little or no clean up, and allowing easy access to the fiber.
- Buffer tubes shall be stranded around a central member using the reverse oscillation or "S-Z", stranding process. Filler rods should be used in trunk line cable to lend symmetry to the cable section.

- Shall have a central strength member designed to prevent buckling of the cable and dielectric tensile strength members designed to minimize cable elongation due to installation forces and temperature variation.
- Shall be certified for a 20-year life expectancy when installed to manufacturer's specifications
- Shall withstand a 600-lb. force maximum installation tensile load and a long-term installed maximum tensile service load of 180 lb. force
- Capable of bend radii as small as 20 times the outside cable diameter (under installation load) and 10 times the outside cable diameter (long term load).
- Shall have a storage/operating temperature range of -40°C to +70°C
- Shall have a black outer jacket constructed of a high or medium density polyethylene (HDPE or MDPE) that has been applied directly over the tensile strength members and water-blocking material. The jacket shall have at least one ripcord for easy sheath removal.
- Shall have an outer jacket with sequential length markers, in a contrasting color to the cable jacket, at regular intervals of between 3 and 5 feet (in English units) along the outside of the jacket. Also, printed on the jacket shall be the cable code to identify the number and type of fibers, manufacturer's name, manufacturer's part number and the year of manufacture. Jacket markings shall be readable and proportionate in height to the cable and must be permanent and weatherproof.
- Crush Resistance of 220 N/cm, per TIA/EIA-455-41 and IEC 794-1-E3
- Shall have a maximum attenuation of 0.25 dB/km at 1550 nm and 0.35 dB/km at 1310nm
- All fiber optic cable installed in conduit shall have a separate tracer wire installed.

### **Construction Requirements**

All Fiber Optic Cable shall be a continuous cable of sufficient length to satisfy the runs shown in the Plans including slack without additional full cable splices except as specified in the Plans. Additional splice locations proposed by the contractor other than shown on the project plans must be approved by the Engineer. The Fiber Optic Cable shall be wound on the reel in such a way as to provide access to both ends for testing while the cable is on the reel.

When Fiber Optic Cable is pulled through a pull box, the Contractor shall ensure that the cable is protected from sharp edges and excessive bends. Each cable will be hand-assisted at each pull box and will be neatly coiled in pull boxes at a minimum radius of 20 times the outer diameter of the cable. Cable will be secured with Velcro ties per common practices and standards.

Fiber Optic Cable shall be pulled according to the cable manufacturer's recommended installation procedures. Manufacturer-approved pulling grips, cable guides, feeders, shoes and bushings shall be used to prevent damage to the cable during installation. The Contractor shall use a pre-lubrication or continuous lubrication method. The lubricant used will be compatible with the cable jacket as recommended by the cable manufacturer. Liquid detergent shall not be used. Cable shall not drag on the ground or pavement during installation. The Contractor shall ensure that the tensile load on the cable does not exceed the allowed maximum by using a system that includes a means of alerting the installer when the pulling tension approaches the limit and displays the actual tension on the cable. The Contractor may supplement this procedure with a breakaway tension limiter set below the recommended tensile limit of the cable being pulled.

Where cables are to be installed in conduit with existing cables or wires that shall remain, the Contractor shall not damage the existing cables or wires and shall install Fiber Optic Cable within innerduct. The innerduct shall be constructed of a flexible fabric, not HDPE, to minimize space usage within the shared traffic signal conduit, and should be pre-lubricated for installation. The innerduct shall be comprised of a single cell and shall be supplied with standard 1250lb color-coded pull tape. The Contractor shall install the innerduct according to the manufacturer's recommended installation procedures.

The Contractor shall disconnect, remove, reinstall, and reconnect the existing cables and wires as necessary to facilitate the installation of the new cable upon notification of the Engineer. The Contractor shall be responsible for any damage to the existing cables or wires caused by this operation. New and existing conductors shall be terminated and labeling reconciled.

Where cables are to be installed in a shared conduit with existing traffic signal wiring, an International Municipal Signal Association (IMSA) Certified Traffic Signal Field Technician – Level II shall be on the Work Site at all times during installation. A Uniformed Police Officer will be required on-site as stated in the City of Tempe Traffic Barricade Manual, latest edition.

All "pull through" pull boxes shall have 50 feet of Fiber Optic Cable slack provided. All pull boxes with splice closures shall have 50 feet of Fiber Optic Cable slack provided into and out of the splice closure within the pull box, allowing the attached splice closure to be removed up to 50 feet from the pull box. All pass-through pull boxes without splice closures shall have 15 feet of Fiber Optic Cable slack coiled in the pull box.

All Fiber Optic Cables shall have permanent identification labels attached, with labels and the method of attachment approved by the Engineer. Approved labels shall be installed on each Fiber Optic Cable near the point where it enters/exits the pull box. A cable passing through a pull box, whether spliced or not, shall have two labels, one near each entry/exit point to the pull box. A typical trunk line pull box, with a branch fiber optic cable, would have three labels, two on the trunk line fiber optic cable (one on each side of the splice closure) and one on the branch fiber optic cable. All labels shall include "City of Tempe ITS", the fiber type and strand count, e.g., "SMFO 48", and the destination, e.g., "Traffic Signal Cabinet" or the terminal point for the fiber optic segment.

Fiber Optic Cable shall be spliced only at the pull box locations specified on the Plans. At these designated locations, each single mode fiber shall be fusion spliced according to the splice details in the Plans. All fusion splices and connectors shall be prepared in accordance with the recommendations of cable, splice and connector manufacturers. Fusion splice losses shall not exceed 0.1 dB and connectors shall not introduce a loss exceeding 0.5 dB. If any fiber exceeds maximum allowable attenuation or if fiber properties of the cable have been impaired, take appropriate actions up to and including replacement of the fiber cable. Corrective action will be at no additional cost.

The Contractor shall secure a certification from the cable manufacturer that the cable is in conformance with the Rural Utilities Service (RUS) Bulletin PE-90a (where applicable).

### **Testing Requirements**

All new and existing empty conduit shall be tested for continuity and integrity no more than one week prior to the installation of Fiber Optic Cable. Conduit shall be tested by pulling through a metal-disc mandrel with a diameter 10% less than the conduit's inside diameter and at least 8"

long, or brushed or swabbed, as the situation requires. Conduit which is found to not be continuous, missing or broken, or in any other way damaged and unsuitable for Fiber Optic Cable installation, shall be exposed and documented with a detailed description and photographs and the Engineer shall be notified. No repair work shall be done.

The Contractor shall conduct power meter tests for each terminated fiber to measure the installed fiber cable attenuation, demonstrate connectivity and correct splicing. The contractor shall perform power meter tests on each fiber strand terminated with connectors utilized in circuits, in accordance with Method A.3 of TIA/EIA-526-7 and submit test results for each fiber to the Engineer. Power meter tests shall be conducted after all cable has been installed, all splices have been made and Fiber Optic Patch Panels have been installed. Testing shall be conducted at the cable ends in one direction for all fiber strands using 1310nm wave length. The testing shall include a test summary spreadsheet listing, at a minimum, the parameters for each buffer tube by cable.

The Contractor shall test (at 1310nm and 1550nm) all terminated fibers of each Fiber Optic Cable using an Optical Time Domain Reflectometer (OTDR) in accordance with TIA/EIA-758. Tests should be conducted in compliance with EIA/TIA-526-14, EIA/TIA 526-7 or OFSTP 14, Method B, according to the manufacturer's instructions for the test set being utilized. Splices testing 0.1 dB or greater, or connectors testing 0.5 dB or greater, shall be remade. If any fibers are out of specification, the entire Fiber Optic Cable run shall be replaced at no additional cost.

Clearly label each OTDR trace identifying a starting and ending point for all fibers being tested. Record the attenuation level of each fiber and clearly indicate OTDR trace results in report format. OTDR readings must not include any unexpected discontinuities such as would be present if the fiber optic cable was damaged during installation. The dB loss per kilometer shall be less than 1.0 dB for the fiber optic cable installation to be acceptable. Results are to be recorded and supplied to the Engineer in the form of hard-copy printouts or photographs of screen traces.

Demonstrate that the attenuation for each fiber string, termination, and splice, individually and as a whole complies with the loss budgets required by the Specifications. Clearly annotate each event (connector, jumper cable, pigtail, splice, etc.) and identify the measured loss.

Following completion of all testing, and approval by the Engineer, the Contractor shall compile and submit an organized set of electronic files (PDF) reflecting the post-installation tests. These files shall include a fiber test summary that includes, at a minimum, the OTDR traces of each fiber strand and the power meter test results. The Contractor shall provide copies of certificates of calibration for Optical Time Domain Reflectometers (OTDRs), fusion splicers and Power Meters issued within the past 12 months and may be asked to verify that applicable components are replaced at the recommended intervals. The Contractor shall observe the manufacturer's recommended testing procedures for each piece of test equipment.

### **Method of Measurement**

The Fiber Optic Cable installation will be measured by the linear foot for each cable furnished, installed and tested, complete in place. No additional measurement shall be made for the innerduct, if needed, the tracer wire or associated work and shall be considered included in the bid item.



### **Basis of Payment**

The Fiber Optic Cable will be paid as measured above. The contract unit price shall be full compensation for the Fiber Optic Cable described and specified herein complete in place, and successfully complying with the test requirements. No additional payment shall be made for the innerduct or associated work and shall be considered included in the bid items.

**BID ITEM 4: 2" ITS CONDUIT**

**BID ITEM 5: 2-2" ITS CONDUIT**

**BID ITEM 6: 3-2" ITS CONDUIT**

**BID ITEM 7: 4-2" ITS CONDUIT**

### **Description**

The work under these items shall consist of furnishing and installing conduit for fiber optic cable installation including boring, excavating, trenching, backfilling, and compacting at the locations designated on the Plans and in accordance with the details shown on the Plans and the requirements of these Technical Specifications.

All conduit shall be placed by trenching or directional drilling in the pavement or behind the curb or by bridge attachment as specified on the plans and as approved by the Engineer.

### **Materials**

All conduit and fittings shall be listed by UL, and conform to NEC standards. Except as specified below, all conduit to be installed underground or in concrete structures shall be rigid Polyvinyl Chloride (PVC) non-metallic type conforming to the requirements of UL 651 for Rigid Non-Metallic Conduit. PVC conduit and fittings shall be Schedule 40, heavy wall, manufactured from high impact material and shall be rated for use at 90° C.

All exposed conduit and fittings to be installed above ground shall be the rigid metal type manufactured of galvanized steel conforming to requirements of UL 6 for Rigid Metallic Conduit. Non-threaded couplings shall not be used. Rigid metal galvanized steel conduit bends shall be used for entering pull boxes that are spaced more than 150 feet apart.

Unless otherwise shown on the Plans, bends, conduit fittings, expansion joints, sweeps and other conduit accessories not specifically mentioned shall be from a material similar to the connecting conduit.

Conduit elbows used for fiber optic cable installations (including future installations) shall be a minimum of 36-inches, unless otherwise specified in the plans.

Should the contractor choose to substitute HDPE conduit in place of the installation of direct buried PVC conduit, the HDPE conduit must meet the Technical Specifications for HDPE conduit listed below, and the contractor shall provide original data sheets or a Certification of Compliance letter from the HDPE conduit manufacturer to the Engineer stating that the product meets these Technical Specifications and obtain the written approval from the Engineer prior to procuring and installing the HDPE conduit. Direct buried HDPE conduit shall be paid at the unit bid price of direct buried PVC conduit.

The contractor shall use a HDPE conduit with a Standard Dimensional Ratio (SDR) of SDR 11 or better. The HDPE formulations used by the manufacturer must be specifically for conduit

applications in accordance with ASTM F 2160: Solid Wall High Density Polyethylene (HDPE) Conduit Based on Controlled Outside Diameter (OD) and ASTM D3035 Polyethylene (PE) Plastic Pipe (SDR) Based on Controlled Outside Diameter. It shall have a cell classification of PE334470C (for black conduit) and PE334470E (for colored conduit) per ASTM 3350: Standard Specification for Polyethylene Pipe and Fittings Materials.

The polyethylene base resin shall meet the density requirement and melt index properties described herein. The density shall not be less than 0.940 and not more than 0.955 g/CM<sup>3</sup> in accordance with ASTM D 1505: Standard Test Method for Density of Plastics by the Density-Gradient Technique. The range for the melt index shall be between 0.05 to 0.5g/10 minutes in accordance with ASTM D 1238: Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer. The HDPE conduit shall have a minimum Flexural Modulus, of 80,000 psi, per ASTM D 790 and a minimum tensile strength at yield of 3,000 psi, per ASTM D-638.

Additives to the base resin shall be included to provide heat stabilization, oxidation prevention and ultraviolet (UV) protection. It shall also utilize carbon black in the range of 2 to 3 percent for long term protection against UV degradation. The minimum protection period shall be one year from date of manufacture in unprotected, outdoor storage in accordance with ASTM D 1603: Standard Test Method for Carbon Black in Olefin Plastics.

### **Construction Requirements**

Conduit runs shown on the Plans may be changed to avoid underground obstructions as approved by the Engineer. Conduit that crosses an existing underground utility shall be a minimum of 5 feet under the existing utility. Conduit that is parallel to an existing underground utility shall be a minimum of 2 feet horizontally and vertically from the existing utility. The contractor shall protect in place all existing utilities.

The contractor may, at its option and at no additional cost to the City, use a larger size conduit than specified provided the larger size is continuous for the entire length of the run from outlet to outlet. Reducing couplings will not be permitted. Changes in the location and size shown on the Plans shall be documented by the contractor and submitted to the Engineer.

The PVC conduit shall be cut square and trimmed to remove all rough edges. Conduit connections shall be of the solvent weld type. Purple primer conforming to the requirements of ASTM F 656 shall be applied to the joined surfaces prior to use of cement. The joint cement shall be the gray PVC cement conforming to the requirements of ASTM D 2564. Where a connection is made to steel conduit, the coupling used shall be a PVC female adapter.

All PVC conduit shall be stored and handled in an approved manner to minimize ultraviolet deterioration due to exposure to sunlight.

Where necessary to prevent physical damage to the raceway or cable, protection shall be provided in the form of granular or selected material, suitable running boards, suitable sleeves, or other approved means.

Excavation shall consist of the saw cut, excavation and removal of all materials necessary to complete the work as shown on the Plans. When material that is excavated is determined to be unsuitable by the engineer, such material shall be removed to the limits directed by the engineer and the resulting area shall be backfilled with suitable material. All excavated areas including pavement, sidewalk, curb and gutter and ground shall be restored to the before condition.

Backfill material may be compacted by either mechanical or pneumatic tamping devices. Compaction equipment or methods which may cause excessive displacement shall not be used.

Conduits shall be installed at a minimum depth of 30 inches unless otherwise approved by the Engineer. When conduit cannot be installed at the minimum depth, it shall be encased in concrete. Where specified due to shallow trenching depths, the conduit shall be encased in a minimum of three inches of concrete. The conduit shall be supported with masonry block or brick on 10-foot centers, during encasement, so that the conduit will be completely encased.

Except for factory bends, conduit bends shall have a radius of not less than that specified in the NEC. Conduit shall be bent without crimping or flattening, using the longest radius practicable.

The contractor shall place warning tape in all trenches in which new conduit is placed. All warning tape shall be buried at a depth of six to eight inches below the finished grade.

Conduit entering pull boxes shall terminate a minimum of three inches inside the box wall. The conduit shall be between two and four inches above the bottom of the pull box and shall be sloped to facilitate pulling of conductors. Conduit entering through the bottom of a pull box shall be located near the sides and ends in order to leave the major interior portion clear. At all outlets, conduits shall enter from the direction of the run, exit in the direction of the run and allow for expansion and contraction. In those locations where the conduit is changing from PVC or HDPE to RMC or vice versa, the change shall occur within a pull box.

Conduit ends shall be capped with conduit end cap fittings until wiring is started. When end caps are removed, PVC ends shall be provided with an approved conduit end bell. End bells shall be installed prior to the installation of the conductors. Approved insulated grounding bushings shall be used on steel conduit ends.

There are three intersections, Warner, Curry, and Weber; where new conduit will be installed directly to the traffic signal cabinet as shown on the plans. All above ground conduit and fittings shall be rigid metallic conduit and paid for as 2" conduit. All labor and materials necessary to drill a hole in the cabinet and securely connect the conduit shall be considered incidental to the 2" conduit and no separate measurement or payment will be made for this work.

a) If directional drilling is the method of construction, the proposed Horizontal Directional Drill (HDD) profile shall be approved by the Engineer, after the contractor has completed the necessary potholing and prior to beginning the Horizontal Directional Drill operation at each location. All final bore profiles shall be submitted to the Engineer.

For all HDD conduit installations, the contractor shall use HDPE conduits along the prescribed bore path from the surface with minimal impact to the surrounding area. The pulling tension for installing the HDPE conduit shall not exceed 75 percent of the manufacturer's tensile strength rating for each size and configuration of conduit(s) to prevent the conduit(s) from elongation or "necking down" during installation. All HDD conduit installations shall be in accordance with ASTM F 1962.

The contractor's HDD operations shall utilize the "walkover" locating system or other Engineer approved equivalent for determining the location of the bore head. A sonde, behind the bore head shall register the depth, angle, rotation and directional data. At the surface, a

receiver compatible with the sonde shall be used to gather the data and relay the information to the HDD equipment operator.

When joining segments of HDPE conduit, the contractor shall utilize non-corrosive, sit-tight, water-tight couplings. Heat fusion, electrofusion fittings and mechanical connections shall be permitted if the HDPE conduit and joining device manufacturer's recommendations are observed and the internal diameter of the HDPE conduit is not reduced. Extrusion welding and hot gas welding to join HDPE conduits is not permitted.

Upon completion of joining HDPE conduit sections and setting the pull boxes, the contractor shall clean the HDPE conduit with compressed air. The contractor shall demonstrate by pulling a cleaning mandrel or ball mandrel, correctly sized for the conduit (80 percent of the HDPE inside diameter), that the conduit was not deformed during installation. If the mandrel passes through the HDPE, the contractor shall install the detectable pull tape. If the mandrel encounters a deformity in the HDPE conduit, the contractor shall replace the entire segment(s) of HDPE between pull boxes with new HDPE at no cost to the City.

For conduit construction by direction drilling, the drill pits in the pavement, sidewalk, or landscape areas required for this construction shall be restored to the before construction condition. All material and labor required to restore pavement, sidewalk, or landscape areas shall be considered incidental to the bid items for installing conduit. No additional measurement or payment shall be made for this work.

b) If conduit is attached to any bridge fascia, construction shall be in accordance with Detail I, unless otherwise approved by the engineer. Such conduit shall be rigid metallic conduit. The contractor shall provide the Engineer a plan that details how and where the conduit will be attached to any bridge on the project.

The contractor is advised that attaching to the Rural Road bridge over US 60 will require a permit and approval by ADOT and may require freeway closure(s).

c) If conduit construction is by trenching in pavement, sidewalk, or landscape areas; all material and labor required to restore these areas to the before construction condition shall be considered incidental to the bid items for installing conduit. No additional measurement or payment shall be made for this work.

#### **Method of measurement**

Conduit will be measured by the linear foot for each diameter size and number based on the following:

- From center to center of pull boxes
- From edge of conduit to center of pull box
- From end to end of conduit when no pull boxes are used

Vertical conduits and conduit sweeps, conduit in pull boxes, conduit reducers, conduit in foundations, concrete encasement of conduits, and clearing and grubbing are not measured or paid and are considered incidental to the bid items. The contractor is alerted to the fact that hand digging may be required in the installation of trenches and pull boxes. Hand digging shall be considered incidental to this work.

There is no measurement for the use of ABC slurry and half-sack slurry to meet utility company requirements and City of Tempe requirements.

There is no measurement for restoring decomposed granite, pavement, sidewalk, curb and gutter, or other landscape material to existing conditions before construction activities.

There is no measurement for restoring the drill pits in pavement or earth.

There is no measurement for drilling a hole in the traffic signal cabinet and installing and sealing 2" RMC.

#### **Basis of Payment**

The accepted quantities of conduit, measured as provided above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for the work, complete in place, including saw cut, excavation, backfill and any incidentals necessary to complete the work.

No direct payment will be made for rigid non-metallic conduit bends at pull boxes, expansion fittings and coupling fittings, the cost being considered as included in the contract price for the conduit items.

No additional payment will be made for an ADOT permit and any freeway closure will be paid for under Bid Item 26: TRAFFIC CONTROL.

No additional payment will be made for the use of ABC slurry and half-sack slurry, the cost of which shall be considered incidental and included in the bid items.

No additional payment will be made for restoring decomposed granite, pavement, sidewalk, curb and gutter, or other landscape to existing conditions before construction activities, the cost of which shall be considered incidental and included in the bid items.

No additional payment will be made for restoring the drill pits in pavement or earth, the cost of which shall be considered incidental and included in the bid items.

No additional payment will be made for drilling a hole in the traffic signal cabinet and installing and sealing 2" RMC, the cost of which shall be considered incidental and included in the bid items.

#### **BID ITEM 8: TERMINAL FIBER OPTIC SPLICE CLOSURE**

#### **BID ITEM 9: MID-SPAN FIBER OPTIC SPLICE CLOSURE**

#### **BID ITEM 10: FULL FIBER OPTIC SPLICE CLOSURE**

##### **Description**

The work under these items shall consist of furnishing and installing Fiber Optic Splice Closures, including sufficient splice trays to accommodate all fiber optic strands within the trunk cable, in pull boxes and as shown on the plans.

The Contractor shall furnish and install cable splice closures including fiber optic splices in accordance with the splice details on the plans. The Contractor shall place splice closures in No. 7 or No. 9 pull boxes by a method described below or as approved by the Engineer. The

Contractor shall furnish all Fiber Optic Splice Closures from the same manufacturer. All equipment shall be new and in strict accordance with the following requirements.

### **Material Requirements**

At a minimum, each splice closure shall meet the following requirements:

- Cylindrical butt-end-style design that is corrosion resistant, watertight, and meets Bellcore GR-771-CORE and GR-769-CORE requirements.
- Base and dome shall be sealed with a clamp and O-ring system
- Four (4) round cable ports shall be provided in a wraparound block with pre-installed gel profile for cable sealing.
- Block shall be capable of being opened and closed repeatedly without the need to remove or replace gel.
- Splice trays shall be hinged for access to any splice without disturbing other trays.
- Splice trays shall meet ANSI/EIT/TIA-568-C and 606 and be compatible with the fiber to be installed.

### **Construction Requirements**

The Contractor shall install the splice closure in No. 7 or No. 9 pull boxes as shown on the plans and in accordance to the manufacturer's recommended installation procedures.

All fibers shall be fusion spliced according to the splice details and Plan notes including fibers designated to be coupled with fibers from a drop cable assembly and cut fibers designated to pass through the splice closure. Unused fibers shall be capped and placed within the buffer tubes in the splice closure. Unused cable ports shall be plugged.

Splice Closures shall be installed so that the two trunk cable entries are on the same side of the end cap so that if other branch fiber cables are installed at a later date, the two existing seals remain undisturbed. All fiber optic cables entering the splice closure shall have permanent identification labels attached with labels and the method of attachment approved by the Engineer. All labels shall include "City of Tempe ITS", the fiber and strand count e.g. "SMFO 48", and the destination, e.g. "Traffic Signal Cabinet" on the terminal point for the fiber optic segment.

After the splice closure is sealed for the final time and final testing is completed, a seal leak test shall be performed following the manufactures recommendation to verify that the splice closure was installed properly.

### **Method of Measurement**

The Fiber Optic Splice Closure shall be measured as each unit of furnished and installed, complete in place. The installation shall include the splice closure and all incidental splice trays, closure and accessory kits, cables, connections and hardware.

### **Basis of Payment**

The Fiber Optic Splice Closure will be paid as measured above. The contract unit price shall be full compensation for the Fiber Optic Splice Closure described and specified herein, complete in place.

## **BID ITEM 11: GIGABIT FIBER SWITCH**

### **Description**

The work under this item shall consist of furnishing, installing, integrating and testing the Gigabit Fiber Switch and associated mounting hardware, copper patch cords, cabling, software and various accessories as required for a fully functional and operational Gigabit Fiber Switch.

The Contractor shall furnish all Gigabit Fiber Switches from RuggedCom. All equipment shall be new and in strict accordance with the following requirements.

### **Material Requirements**

The Contractor shall furnish the following Gigabit Fiber Switch:

- RuggedCom RS940G-HI-D-2SC25-XX

### **Construction Requirements**

Contractor shall meet all applicable codes and standards requirements for all external wiring to the Gigabit Fiber Switches. All wires and cables shall be neatly installed (coiled) and secured with Velcro ties per common practices and standards. The Contractor shall provide a service loop at all connection points. All factory caps and plugs removed from the Gigabit Fiber Switch shall be stored safely within the signal cabinet for later use.

Contractor shall provide and install a CAT5E patch cord (1m in length, typically) in each copper (TX) port of the Gigabit Fiber Switch, to provide connectivity to the City of Tempe's ITS Network.

The Contractor shall be responsible for programming the Gigabit Fiber Switch. This includes ensuring that the configuration of each uplink port connecting to neighboring switches is trunked allowing multiple VLANs to pass.

The City will provide IP addresses, netmasks, gateways, port assignments, VLAN configuration, NTP server and other required information. The Contractor will apply all available firmware upgrades to the Gigabit Fiber Switch.

The Contractor shall minimize disruption to any existing communications equipment within the signal cabinet and coordinate any equipment switchover with the Engineer.

### **Testing Requirements**

The Contractor shall ensure that the Gigabit Fiber Switch is correctly installed, configured and operational. The Contractor shall demonstrate to the Engineer that the Gigabit Fiber Switch is functioning properly and that it, and all connected devices, are visible on the ITS Network from the Tempe Transportation Management Center.

### **Method of Measurement**

The Gigabit Fiber Switch installation will be measured as each unit of furnished, installed and tested, complete in place. The installation shall include the Gigabit Fiber Switch and all incidental cables, connectors and hardware.

## **Basis of Payment**

The Gigabit Fiber Switch will be paid as measured above. The contract unit price shall be full compensation for the Gigabit Fiber Switch described and specified herein complete in place, and successfully complying with the test requirements.

## **BID ITEM 12: FIBER SWITCH**

### **Description**

The work under this item shall consist of furnishing, installing, integrating and testing the Fiber Switch and associated mounting hardware, copper patch cords, cabling, software and various accessories as required for a fully functional and operational Fiber Switch.

The Contractor shall furnish all Fiber Switches from RuggedCom. All equipment shall be new and in strict accordance with the following requirements.

### **Material Requirements**

The Contractor shall furnish the following Fiber Switch:

- RuggedCom RS900G-HI-D-2SC25-XX

### **Construction Requirements**

Contractor shall meet all applicable codes and standards requirements for all external wiring to the Fiber Switches. All wires and cables shall be neatly installed (coiled) and secured with Velcro ties per common practices and standards. The Contractor shall provide a service loop at all connection points. All factory caps and plugs removed from the Fiber Switch shall be stored safely within the signal cabinet for later use.

Contractor shall provide and install a CAT5E patch cord (1m in length, typically) in each copper (TX) port of the Fiber Switch, to provide connectivity to the City of Tempe's ITS Network.

The Contractor shall be responsible for programming the Fiber Switch. This includes ensuring that the configuration of each uplink port connecting to neighboring switches is trunked allowing multiple VLANs to pass.

The City will provide IP addresses, netmasks, gateways, port assignments, VLAN configuration, NTP server and other required information. The Contractor will apply all available firmware upgrades to the Fiber Switch.

The Contractor shall minimize disruption to any existing communications equipment within the signal cabinet and coordinate any equipment switchover with the Engineer.

### **Testing Requirements**

The Contractor shall ensure that the Fiber Switch is correctly installed, configured and operational. The Contractor shall demonstrate to the Engineer that the Fiber Switch is functioning properly and that it, and all connected devices, are visible on the ITS Network from the Tempe Transportation Management Center.



### **Method of Measurement**

The Fiber Switch installation will be measured as each unit of furnished, installed and tested, complete in place. The installation shall include the Fiber Switch and all incidental cables, connectors and hardware.

### **Basis of Payment**

The Fiber Switch will be paid as measured above. The contract unit price shall be full compensation for the Fiber Switch described and specified herein complete in place, and successfully complying with the test requirements.

## **BID ITEM 13: 4 PORT FIBER OPTIC PATCH PANEL WITH 4-STRAND SMFO**

### **Description**

The work under this item shall consist of furnishing, installing, integrating, and testing the Fiber Optic Patch Panel, and associated mounting hardware, cabling, and various accessories, as required for a fully functional and operational unit.

The Fiber Optic Patch Panel, in conjunction with an integrated drop cable, serves as the attachment point from the signal cabinet to the trunk fiber optic cable. All Fiber Optic Patch Panels shall be field measured before ordering, with applicable slack requirements added to the field measured length before ordering.

The Contractor shall furnish all Fiber Optic Patch Panels from the same manufacturer. All equipment shall be new and in strict accordance with the following requirements.

### **Material Requirements**

At a minimum, each Fiber Optic Patch Panel shall meet the following requirements:

- Shall be comprised of a factory terminated 4-strand SMFO drop cable integrated into a protective housing and a custom length of loose tube drop cable.
- Shall have four (4) ST standard connectors, with all connectors sealed by manufacturer-supplied plugs/caps.
- Shall be black in color, constructed of polycarbonate material, with integrated mounting notches for field mounting within the traffic cabinet.
- Shall have two (2) pairs of couplers arrayed at a 45° angle along the length of the housing in a stair-stepped arrangement to facilitate easy access to each coupler pair. Each coupler port shall have a permanent label/identifier clearly visible to designate the port number.
- Shall incorporate a strain relief boot around the exiting drop cable to provide bend radius protection and short term cable retention of at least 200lbf.
- Shall have fiber optic connectors constructed with all ceramic ferrules. The fiber shall be secured into the ferrule using a heat cured epoxy and shall be factory terminated and polished.

- Shall be filled with an environmentally stable epoxy to permanently secure the connectors and protect the internal components from vibration and shock. The epoxy shall be thermally stable from -40°C to +54°C.

### **Construction Requirements**

The Fiber Optic Patch Panel shall be installed on the lower left side of the signal cabinet, near the rear wall, according to the manufacturer's recommended installation procedures.

All wires and cables shall be neatly installed (coiled) and secured with Velcro ties per common practices and standards.

The Contractor shall provide slack at all connection points, with a minimum of 50 feet of slack (coiled) at all fiber splice locations, 15 feet at all pass-through pull boxes, and 15 feet at the signal cabinet, with all slack provided after splices have been made.

Where cables are to be installed in conduit with existing cables or wires that shall remain, the Contractor shall not damage the existing cables or wires and shall install the Fiber Optic Patch Panel drop cable within an innerduct. The innerduct shall be constructed of a flexible fabric, not HDPE, to minimize space usage within the shared traffic signal conduit, and should be pre-lubricated for installation. The innerduct shall be comprised of a single cell and shall be supplied with standard 1250lb color-coded pull tape. The Contractor shall install the innerduct according to the manufacturer's recommended installation procedures.

The Contractor shall disconnect, remove, reinstall, and reconnect existing cables and wires as necessary to facilitate the installation of the new cable upon notification of the Engineer. The Contractor shall be responsible for any damage to the existing cables or wires caused by this operation. New and existing conductors shall be terminated and labeling reconciled. No additional payment will be made as this work shall be considered incidental to the associated items.

All Fiber Optic Patch Panel drop cables shall have permanent identification labels attached, with labels and the method of attachment approved by the Engineer. Approved labels shall be installed on each Fiber Optic Patch Panel drop cable near the point where it enters/exits the pull box. A typical trunk line pull box, with a Fiber Optic Patch Panel drop cable, would have three labels, two on the trunk line fiber optic cable (one on each side of the splice closure) and one on the Fiber Optic Patch Panel drop cable. All cables shall include "City of Tempe ITS", the fiber type and strand count, e.g., "SMFO 48", and the destination, e.g., "Traffic Signal Cabinet" or the terminal point for the fiber optic segment. Pulling of the fiber optic drop cable shall comply with requirements specified within the Technical Specifications.

The Fiber Optic Patch Panel drop cable shall be detectable through the installation of a separate #14 green tracer wire installed alongside the drop cable within the conduit.

### **Testing Requirements**

Fiber terminations shall be visually and optically tested as specified under Bid Item #2, Fiber Optic Cable.

The Contractor shall provide factory test results for reflectance and insertion loss for each Fiber Optic Patch Panel. This test report shall reference the serial number of the patch panel installed and be provided to the Engineer after installation.

### **Method of Measurement**

The Fiber Optic Patch Panel shall be measured as each unit furnished and installed, complete in place and in compliance with all testing requirements. No separate measurement shall be made for the separate tracer wire or innerduct.

### **Basis of Payment**

The Fiber Optic Patch Panel will be paid as measured above. The contract unit price shall be full compensation for the Fiber Optic Patch Panel described and specified herein complete in place, and successfully complying with the test requirements. No payment shall be made for the separate tracer wire or innerduct, the cost of which shall be considered incidental and included in the bid items.

## **BID ITEM 14: DUPLEX ST-SC FIBER OPTIC PATCH CABLE**

### **Description**

The work under this item shall consist of furnishing, installing and testing Fiber Optic Patch Cables as required for a fully functional and operational communications network.

The Contractor shall furnish all Fiber Optic Patch Cables from the same manufacturer. All equipment shall be new and in strict accordance with the following requirements:

### **Material Requirements**

At a minimum, each Fiber Optic Patch Cable shall meet the following requirements:

- Duplex 9/125 single mode fiber with wavelength of 1310/1550 nm
- Rugged PVC sheathing
- Factory terminated connectors, with ST on one end; SC on the other
- Both cable ends will be ruggedized for strain relief
- Permanent markings or color identifiers shall permit visual distinction between the two fibers
- Length shall be 6 feet

### **Construction Requirements**

The Contractor shall install the Fiber Optic Patch Cables within the signal cabinet, connecting the Fiber Optic Patch Panel to the Gigabit/Fiber Switch as per the port assignment provided by the Engineer. Cables shall be neatly installed (coiled) and secured with Velcro wraps per common practices and standards and all manufacturer recommended installation and minimum bend radius requirements shall be met. All factory caps and plugs removed from the Fiber Optic Patch Cables shall be stored safely within the signal cabinet for later use.

### **Testing Requirements**

The Contractor shall furnish the manufacturer's test results of each Fiber Optic Patch Cable to the Engineer and shall include installed Fiber Optic Patch Cables in all fiber optic test results conducted, as specified within the Technical Specifications. All Fiber Optic Patch Cables with a

connector loss greater than 0.5 dB shall not be accepted and must be replaced at no additional cost.

**Method of Measurement**

Fiber Optic Patch Cables will be measured as each unit of cable furnished, installed and tested, complete in place.

**Basis of Payment**

The Fiber Optic Patch Cable will be paid as measured above. The contract unit price shall be full compensation for the Fiber Optic Patch Cable described and specified herein complete in place, and successfully complying with the test requirements.

**BID ITEM 15: REMOVE PULL BOX**

**Description**

The work under this item shall consist of the removal and satisfactory disposal of pull boxes designated on the Plans for removal. All excavation shall be performed without causing damage to any existing conduit, cable, pavement, curb and gutter or sidewalk unless approved by the engineer. If the location is not designated for a new pull box, the contractor shall fill the excavation in accordance with City of Tempe and MAG specifications. If the location is designated for a new pull box, the excavation shall accommodate the new pull box. The existing pull boxes and lids shall become the property of the contractor and be removed from the site.

**Method of measurement**

Remove Pull Box will be measured as a unit for each pull box removed.

**Basis of Payment**

The accepted quantity of pull box removed measured as provided above will be paid for at the contract price each, which price shall be full compensation for the work complete in place, including excavation, backfill if new pull box not installed, and any incidentals necessary to complete the work.

**BID ITEM 16: AC POWER RECEPTACLE**

**Description**

The work under this item coincides with Bid Item 23 and shall consist of furnishing and installing the AC Power Receptacle and associated mounting hardware, as required for a fully functional and operational AC Power Receptacle.

The Contractor shall provide all AC Power Receptacles from the same manufacturer. All equipment shall be new and in strict accordance with the details shown herein.

**Material Requirements**

The Contractor shall provide a 2-gang duplex non-GFI protected electrical outlet compatible with a NEMA TS2 Type 1 traffic signal cabinet.

### **Construction Requirements**

The AC Power Receptacle will connect to cabinet power per the cabinet manufacturer's recommendation. Contractor shall meet all applicable codes and standards requirements for all external wiring to AC Power Receptacle. All wires and cables shall be neatly installed (coiled) and secured with break-away ties per common practices and standards. Final connections shall be made by a licensed electrician.

### **Testing Requirements**

The Contractor shall demonstrate to the Engineer that all AC Power Receptacles are functioning properly.

### **Method of Measurement**

The AC Power Receptacle installation will be measured as each unit of furnished, installed and tested, complete in place.

### **Basis of Payment**

The AC Power Receptacle will be paid as measured above. The contract unit price shall be full compensation for the AC Power Receptacle described and specified herein complete in place, and successfully complying with the test requirements.

## **BID ITEM 17: MOBILIZATION**

### **Description**

The work under this item shall consist of preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies and incidentals to the project site; the establishment of all offices, buildings and other facilities necessary for work on the project, and for all other work and operations that must be performed and costs incurred prior to beginning work on the various items on the project site.

The contractor shall inventory all City of Tempe signal and ITS pull boxes and conduit, shown as existing on the plans to be used with this project. The Engineer may elect to accompany the contractor. The contractor shall document all pull boxes and lids that are broken or otherwise not usable in the opinion of the contractor and furnish to the Engineer prior to any work or excavation beginning on the project. The contractor shall deliver the letter a minimum of 2-days prior to beginning of work.

### **Method of Measurement**

Mobilization will be measured for payment by the lump sum as a single complete unit of work.

### **Basis of Payment**

Payment for mobilization, measured as provided above, will be made at the contract lump sum price, which shall be full compensation for supplying and furnishing all materials, facilities and services and performing all the work involved as specified herein. Partial payments under this item will be made in accordance with the following provisions:

Payment shall be made in equal one-third portions as follows:

The first payment will be paid with the Contractor's initial billing.

The second payment will be made when the total payments to the Contractor for the pay items, exclusive of payments for mobilization/demobilization, equal greater than one-half of the initial contracted amount, exclusive of mobilization/demobilization.

The remaining one-third will be paid as part of the final payment due to the Contractor.

The total sum of all payment shall not exceed the original contract amount bid for mobilization, regardless of the fact that the contractor may have, for any reason, shut down work on the project or moved equipment away from the project and back again.

## **BID ITEM 18: LOOP DETECTOR**

### **Description**

The work under this section shall consist of furnishing and installing vehicular detectors as needed when existing detectors cannot be salvaged because of trenching or drilling operations. However, the contractor is advised that all reasonable effort shall be made to avoid damage to existing loop detectors.

### **Material Requirements**

Loop detectors shall be 6' x 40' quadrupole vehicle detectors. The conductors for the loop detectors and the loop detector lead-in cable shall be as specified in ADOT Standard Specifications for Road and Bridge Construction, 2008 edition, section 732-2.01. Saw cut sealant shall be as specified in ADOT Standard Specifications for Road and Bridge Construction, 2008 edition, section. 735-2.04.

### **Construction Requirements**

The construction requirements for loop detector installation shall be as specified in ADOT Standard Specifications for Road and Bridge Construction, 2008 edition, section 735-3.01.

### **Method of measurement**

Loop detectors will be measured as an allowance for each new loop detector installed as approved by the Engineer.

### **Basis of Payment**

The allowance for Loop Detector will not exceed \$20,000.00 for this item of work, with no mark-up, which shall be full compensation for the number of Loop Detectors installed.

## **BID ITEM 19: POTHoles**

### **Description**

Pothole allowance – shall be accomplished in accordance with MAG section 355 except measurement and payment will be an allowance. After the utilities have been blue staked in the field in accordance with AZ Blue Stake 811, the contractor will determine pothole locations and cost per pothole and submit a list of potholes and cost to the engineer for approval.

### **Method of Measurement**

Potholes will be measured as an allowance.

### **Basis of Payment**

Potholes will be paid as measured above. The contract allowance price will be paid upon complete submittal to and approval by the Engineer and shall be full compensation for the item, completed as defined and described above. The allowance for potholes will not exceed \$50,000 for this single complete item of work, with no mark-up.

### **BID ITEM 20: TRAFFIC CONTROL**

Traffic control shall be provided by the Contractor in accordance with the City of Tempe Traffic Barricade Manual, the Manual on Uniform Traffic Control Devices, and MAG Section 401, as directed by the Transportation Division representative. **Allowable hours for restrictions on arterial and collector streets are noted in the Tempe Traffic Barricade Manual.** Requests for night work must be approved by Traffic Engineering and Neighborhood Services. Permit applications and traffic control plans shall be submitted to Traffic Engineering via email at [trafficbarricade@tempe.gov](mailto:trafficbarricade@tempe.gov).

**No work shall begin prior to Engineer's approval of the proposed Traffic Control Plan(s).**

At the time of the Pre-Construction Meeting, the contractor shall designate an American Traffic Safety Services Association (ATSSA) certified individual to be responsible for implementing, monitoring, and altering traffic control measures as necessary to ensure that all traffic (vehicle, bicycle, and pedestrian) is carried through the work area in a safe and effective manner.

The Contractor shall notify the Engineer seven (7) calendar days in advance of the time work will be started in areas requiring the rerouting of traffic, traffic lane striping and removal of street signs. The foregoing shall apply to progressive modifications of traffic routing within an area in which work is in progress.

The Contractor shall ensure that all sidewalks on this project remain in compliance with the Americans with Disabilities Act (ADA) Standards. All open pedestrian walkway areas, paved or unpaved, shall be maintained and safely useable at all times. Such measures as backfilling or ramping to existing sidewalks, or providing alternate sidewalk areas adjacent to existing sidewalks may be used.

The Contractor shall notify residents and businesses within the project area. These actions shall occur a minimum of 14 calendar days prior to the start of construction to notify the public of construction-related restrictions.

Construction signs shall not be displayed to traffic for more than 24 hours prior to the actual start of construction. Signs shall be removed within 24 hours after completion of the construction. Plan preparation, signing, and public notification shall be considered incidental to other items of work and no specific measurement or payment will be made.

All existing signs in conflict with the construction signs shall be removed, covered with plywood, or relocated.

All Type II Barricades, Type III Barricades, and vertical panels shall be equipped with steady burning lights. All orange construction signs shall use high reflectivity sheeting. All signs to be used on the job during periods of darkness shall be reflectorized.

Flagmen and guards, while on duty, and safety devices shall conform to applicable City, and State requirements. It is the Contractor's responsibility to inform the Engineer of hazardous conditions immediately.

An off-duty Arizona POST certified uniformed Police Officer will be present at the project site in accordance with these specifications. Off-duty officers may be required at signalized intersections per City of Tempe Traffic Engineering. Off-duty officers may not be used as flaggers as part of typical traffic control. Preference shall be given to City of Tempe Police Officers. There will be no mark-up allowed on off-duty officer charges.

#### **Method of Measurement**

Traffic Control will be measured as an allowance.

#### **Basis of Payment**

Traffic Control will be paid as measured above. The contract allowance price will be paid upon complete submittal to and approval by the Engineer and shall be full compensation for the item, completed as defined and described above. The allowance for traffic control will not exceed \$250,000 for this single item of work, with no mark-up.

### **BID ITEM 21: STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ALLOWANCE**

#### **Description**

The SWPPP shall be completed in compliance with the Arizona Pollution Discharge Prevention System (AZPDES) for erosion control and pollution prevention requirements and in accordance with City of Tempe standards and procedures.

The SWPPP including the NOI and NOT, installation and maintenance of the Best Management Practices (BMP) and site conditions, inspections, and removal of the BMPs upon completion of the project or as directed by the Engineer.

#### **Method of Measurement**

SWPPP will be measured as an allowance.

#### **Basis of Payment**

The allowance for SWPPP will not exceed \$10,000.00 for this single item of work, with no mark-up, which shall be full compensation for the item as described above.



# **Appendix A**

## **Materials Checklist**

## LOCAL PUBLIC AGENCY MATERIALS CHECKLIST

Project Name: Fiber Optic Cable Installation – Rural Road  
Project Location: Rural Road between Alexander Blvd and McKellips Road  
Project Number: 6907261 (Tempe)  
TRACS No. 0000 MA TMP SZ166 01C  
Federal Aid No. TMP-0(240)D

ITEM NUMBER	MATERIAL	PLAN QUANTITY	ACTUAL QUANTITY	No. OF SAMPLES		No. OF SAMPES TESTED		
				RECOMMENDED		PROJECT		LPA CENTRAL LABORATORY OR INDEPENDENT LABORATORY
				ACCP	IAS	ACCP SAMPLES TAKEN BY PROJECT	ACCP SAMPLES TESTED BY PROJECT	IAS
NA	Pavement Replacement, COT T-450	200 SY		5				
NA	Vert Curb, Gutter & Transitions (Type A), MAG 220-1	250 LF		5	1			
NA	Concrete Sidewalk, 4"	1,500 SF		5	1			

**Notes:**

- If curb and gutter and sidewalk placement happen concurrently, then ACCP sampling can be reduced from 10 total samples to 5 and IAS sampling can be reduced from 2 total samples to 1
- Reference ADOT Materials Testing Manual, Appendix C
  - For pavement replacement, reference Page 45 for Asphaltic Concrete (Miscellaneous Structural) sampling & testing requirements.
  - For concrete sidewalk and curb and gutter, reference Page 37 for Portland Cement Concrete (PCC) Class B sampling & testing requirements.

# **Appendix B**

## **Certificate Log**

ARIZONA DEPARTMENT OF TRANSPORTATION  
**MATERIALS CERTIFICATE LOG**

Fed Aid Project No.: TMP-0(240)D City of Tempe Project No.: 6907261 Contractor: \_\_\_\_\_

Description/Identification of Material	Type of Certificate Required	Date Certificate Required	Description of Material	Quantity Represented	Material Identification	Compliance Statement	Authorized Signature/Date	Test Results (Cert of Analysis)	Date Material Checked Against Cert	Cert Acceptable (Y/N)	Inspector	Comments
Aggregate Base	Compliance											
Concrete	Compliance											
Asphalt Concrete	Compliance											
Concrete Curb & Gutter	Compliance											
Concrete Sidewalk	Compliance											
#7 Pull Box	Shop Drawing											
#9 Pull Box	Shop Drawing											

Description/Identification of Material	Type of Certificate Required	Date Certificate Required	Description of Material	Quantity Represented	Material Identification	Compliance Statement	Authorized Signature/Date	Test Results (Cert of Analysis)	Date Material Checked Against Cert	Cert Acceptable (Y/N)	Inspector	Comments
Splice closure	Shop Drawing											
SMFO Cable	Shop Drawing											
Fiber switch	Shop Drawing											
Patch Panel	Shop Drawing											
ST-SC Cable	Shop Drawing											
Bridge fascia attachment	Shop Drawing											
Conduit	Shop Drawing											

# **Appendix C**

## **Pull Box Table**

Sheet #	Pull Box #	From pull box #	To pull box #	Lid ID	Size
3	1	-	1	City of Tempe ITS	#7
3	2	-	2	City of Tempe IT	#7
4	3	1	3	City of Tempe ITS	#7
5	4	3	4	City of Tempe ITS	#7
7	5	4	5	City of Tempe ITS	#7
7	6	2	6	City of Tempe IT	#7
7	7	6	7	City of Tempe IT	#7
8	8	5	8	City of Tempe ITS	#7
8	9	7	9	City of Tempe IT	#7
10	10	8	10	City of Tempe ITS	#7
11	11	10	11	City of Tempe ITS	#7
12	12	11	12	City of Tempe ITS	#7
12	13	9	13	City of Tempe IT	#7
12	14	13	14	City of Tempe IT	#7
14A	15	12	15	City of Tempe ITS	#7
14A	16	14	16	City of Tempe IT	#7
15	17	15	17	City of Tempe ITS	#7
-	18	not used	-	-	
15	19	16	19	City of Tempe IT	#9
15	20	19	20	City of Tempe IT	#9
15	21	17	21	City of Tempe ITS	#7
16	22	21	22	City of Tempe ITS	#7
17	23	22	23	City of Tempe ITS	#7
19	24	20	24	City of Tempe IT	#7
19	25	23	25	City of Tempe ITS	#7
19	26	25	26	City of Tempe ITS	#7
20	27	26	27	City of Tempe ITS	#7
22	28	27	28	City of Tempe ITS	#7
23	29	28	29	City of Tempe ITS	#7
23	30	29	30	City of Tempe ITS	#7
23	31	24	31	City of Tempe IT	#7
25	32	30	32	City of Tempe ITS	#7
25	33	32	33	City of Tempe ITS	#7
25	34	31	34	City of Tempe IT	#7

Sheet #	Pull Box #	From pull box #	To pull box #	Lid ID	Size
26	35	33	35	City of Tempe ITS	#7
26	36	34	36	City of Tempe IT	#7
26	37	35	37	City of Tempe ITS	#7
28	38	37	38	City of Tempe ITS	#7
28	39	36	39	City of Tempe IT	#7
28	40	39	40	City of Tempe IT	#7
32	41	38	41	City of Tempe ITS	#7
34	42	-	42	Communications	#9
34	43	41	43	City of Tempe ITS	#7
34	44	42	44	Communications	#7
35	45	43	45	City of Tempe ITS	#7
35	46	44	46	Communications	#7
35	47	46	47	Communications	#7
36	48	45	48	City of Tempe ITS	#7
36	49	47	49	Communications	#7
36	50	40	50	City of Tempe IT	#7
37	51	48	51	City of Tempe ITS	#7
37	52	49	52	Communications	#7
37	53	51	53	City of Tempe ITS	#7
37	54	52	54	Communications	#7
38	54A	53	54A	City of Tempe ITS	#7
38	55	54	55	Communications	#9
38	56	54A	56	City of Tempe ITS	#7
39	57	56	57	City of Tempe ITS	#7
39	58	55	58	Communications	#7
39	59	57	59	City of Tempe ITS	#7
39	60	59	60	City of Tempe ITS	#7
39	61	50	61	City of Tempe IT	#7
40	62	58	62	Communications	#9
40	63	60	63	City of Tempe ITS	#7
40	64	62	64	Communications	#9
41	65	64	65	Communications	#7
42	66	65	66	Communications	#9
42	67	61	67	City of Tempe IT	#7



Sheet #	Pull Box #	From pull box #	To pull box #	Lid ID	Size
42	68	63	68	City of Tempe ITS	#7
42	69	67	69	City of Tempe IT	#7
42	70	66	70	Communications	#7
42	71	68	71	City of Tempe ITS	#7
43	72	76	72	City of Tempe IT	#9
44	73	70	74	Communications	#7
44	74	69	74	City of Tempe IT	#7
44	75	71	75	City of Tempe ITS	#7
44	76	74	76	City of Tempe IT	#7
44	77	75	77	City of Tempe ITS	#7
44	78	73	78	Communications	#7
44	79	78	79	Communications	#7
45	80	77	80	City of Tempe ITS	#7
45	81	79	81	Communications	#7
45	82	82	82	Communications	#7
46	83	76	83	City of Tempe IT	#7
46	84	82	84	Communications	#7
46	85	83	85	City of Tempe IT	#7
46	86	80	86	City of Tempe ITS	#7
47	87	84	87	Communications	#7
47	88	85	88	City of Tempe IT	#7
47	89	86	89	City of Tempe ITS	#7
48	90	87	90	Communications	#7
48	91	90	91	Communications	#7
49	92	89	92	City of Tempe ITS	#7
49	93	91	93	Communications	#9
50	94	92	94	City of Tempe ITS	#7
50	95	88	95	City of Tempe IT	#7
50	96	93	96	Communications	#7
50	97	96	97	Communications	#9
50	98	97	98	Communications	#9

# **Appendix D**

## **Utility Requirements**

## **APS Requirements**

1. Maintain min. 2' (foot) horizontal clearance from existing underground 12kV facilities.
2. Maintain min. 1' (foot) vertical clearance from existing underground 12kV facilities.
3. Maintain min. 10' (foot) clearance from existing overhead 12kV facilities.
4. Maintain min. 11' (foot) clearance from existing overhead 69kV facilities. North side of Rio Salado Pkwy crossing Rural Rd & south side of Red Mountain Freeway crossing Rural Rd.
5. Per Blue Stake Law - hand digging is required when within 2' (foot) of energized electrical facilities.
6. A min. 1:1 ratio is required to be maintained when open trenching adjacent to existing APS poles – Ex. 4' (foot) deep trench requires 4' (foot) min. horizontal separation. If a 1:1 ratio can't be maintained the pole will need to be braced.
7. City's contractor shall protect in place all existing APS overhead and underground facilities not impacted by the construction of this project.
8. APS facilities that are not in conflict, but may require any pole bracing, adjustments of manholes to grade (requires presence of aps inspector), installation of warning devices such as tattle tales, temporary relocations of overhead and required outages (due to construction of your project) will be at the cost of the city's contractor.
9. It is the city's contractor's responsibility to maintain minimum OSHA clearances from APS overhead and underground facilities. No equipment, spoils piles, etc; shall be placed beneath and/or over APS facilities.
10. Use caution and follow all bluestake laws.

## COX

Immediately notify Cox Communications Engineering Department of any discrepancies or conflicts determined subsequent to this plan review depending on circumstances of this particular project. If offsite improvement plans are not already submitted, please consider this a request to submit for conflict review. Allow a minimum of 45-days to resolve undetermined conflicts that arise as a result of the construction of this project. All costs to relocate shall be at the expense of the developer/customer. When crossing Cox Communications facilities the contractor shall pothole to determine depth and maintain a minimum of 12 inches of vertical and horizontal separation from the proposed facility. Support and protect all Cox Communications facilities during construction. Cox Communications does not maintain installation records of customer drops that may conflict with this project. Notify Cox Communications Engineering Department of all utility coordination meetings, pre-construction meetings and construction schedules including the anticipated construction start date.

## El Paso Natural Gas

Although it may or may not pertain to this project, as engineering plans are developed, please be aware of the distance NGPL requires third parties to maintain from NGPL facilities for the purposes of safety:

<b>Third Party Facility</b>	<b>Horizontal Distance from Company Facilities</b>
Buried pipelines	At least 10-feet
Buried telephone cable	At least 10-feet
Overhead telephone cable	At least 25-feet
Buried electric cables 440 VAC or less	At least 10-feet
Buried electric cables 440 VAC to 37.5 KVAC	At least 25-feet
Overhead electric lines 37.5 KVAC or less	At least 25-feet
Buried or overhead electric lines – facilities over 37.5 KV, AC or DC electric cable	Only by agreement between the utility and the Company's Project Manager or designee

**Table 2 - Horizontal Distance from Company Facilities**

<b>Third Party Facility</b>	<b>Vertical Clearance from Company Facility</b>
New construction	When installing underground utilities, the last line should be placed beneath all existing lines unless it is impossible or unreasonable to do so.
Buried steel pipelines	At least a 24-inch vertical earth separation from a Company pipeline
Buried non-steel pipelines	At least a 24-inch vertical earth separation from a Company pipeline. At least a 24-inch vertical earth separation from a Company pipeline 12-inches or greater in diameter. Install flagging tape above the Company pipeline, approximately 3-feet on each side and directly over the cable or utility line for a distance of at least 15-feet.

Buried telephone and electric cables – 440 VAC or less	<p>At least a 24-inch vertical earth separation from a Company pipeline</p> <p>The cable must have a nonconductive outer sheath extending at least 10-feet each direction from the Company pipeline. Install flagging tape above the Company pipeline, approximately 3-feet on each side and directly over the cable or utility line for a distance of at least 15-feet.</p>
Fiber optic cables	<p>Efforts should be made to install all fiber optic cable crossings at least 3-feet below Company pipelines.</p> <p>Installing a concrete barrier is recommended (but may not be practical when the cable is a direct bore; in that case, clearance and markings become more critical).</p>
Buried electric cables 440 VAC to 37.5 KVAC	<p>At least a 24-inch vertical earth separation from a Company pipeline.</p> <p>The cable shall have a nonconductive outer sheath extending at least 10-feet each direction from the Company pipeline. Install flagging tape above the Company pipeline, approximately 3-feet on each side and directly over the cable or utility line for a distance of at least 15-feet.</p>
Facilities over 37.5 KV	<p>Vertical separation of an electric cable or line operating at more than 37.5 Kilovolts A.C. or D.C. will be established by agreement between the utility involved and the Company Project Manager or their designee.</p>

# Valley Metro Rail

## VALLEY METRO RAIL COMMENTS FOR CONSTRUCTION NEAR VALLEY METRO LIGHT RAIL TRACKS AND GUIDEWAY

November 28, 2016

- Train and track safety awareness is the number one priority at all times during work on or near the Metro Light Rail guideway.
- All construction crew members are **required** to attend the Valley Metro Rail 'Track Access Training' if needed and are **required** to have a valid 'Track Access' ID at all times when working near the Metro Light Rail. Contact Mike Zang at [mzang@valleymetro.org](mailto:mzang@valleymetro.org) to schedule required training. Training classes are the first working Monday of every month.
- Metro Light Rail guide-way must be kept clear at all times. Staging of materials, equipment or spoils prohibited.
- Potholing is prohibited within Metro Light Rail guide-way.
- Excavations near the Metro Light Rail guide-way must maintain minimum of three (3) feet from edge of guideway or curb.
- Accompanying this document is a permit application that is **required** for all work that crosses the Metro Light Rail tracks and guideway. Email completed access permit to Bruce Browne at [accesspermit@valleymetro.org](mailto:accesspermit@valleymetro.org) by Wednesday COB for work the following week.
- It is **required** that a representative of the construction company attend the weekly '[Track Access Meeting](#)' on Thursday at 10:00 to discuss construction activity related to your request. Meeting is held at the Metro Light Rail Operations and Maintenance Center, 605 S. 48th Street. See accompanying map for directions.
- When working within ten (10) feet from the centerline of the closest track the contractor is **required** to call Metro Light Rail Operations Control Center at (602) 652-5100 prior to start and at the completion of work each day/night and inform Rail Operations Control Center of your work location. This will alert the train operations that construction crews are working very close to the tracks.
- Valley Metro Rail requires a minimum 5' depth under the deepest facility for bores underneath the Light Rail Tracks and Guideway.
- The construction company is **required** to notify and invite Metro Utility Relocation Specialist to preconstruction meeting: Art Mehler ([amehler@valleymetro.org](mailto:amehler@valleymetro.org)), cell phone 602-316-3290.
- City issuing permit will provide final approval and may impose additional requirements or restrictions prior to start of work.